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150 Years of History and Preservation at Cahokia Mounds

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150 YEARS OF HISTORY AND PRESERVATION AT

CAHOKIA MOUNDS

by

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CAHOKIA MOUNDS
HISTORIC SITE

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Introduction

The Cahokia Mounds State Historic Site is the location of what was once the largest pre-Columbian Indian settlement in North America. When speaking of Cahokia Mounds let us not confuse its location with the city of Cahokia, Illinois located ten miles southwest of the mound site. Located only seven miles east of St. Louis, Missouri, Cahokia Mounds lies in close proximity to the mighty Mississippi River in the heart of the American Bottom and near the present day city of Collinsville, Illinois. One early writer, Henry Marie Brackenridge best defined the American Bottom in his 1811 work *Views of the Louisiana* as a, "tract of rich alluvion land, extending on the Mississippi, from the Kaskaskia to the Cahokia river, about eighty miles in length, and five in breadth; several handsome streams meander through it; the soil of the richest kind, and but little subject to the effects of the Mississippi floods. A number of lakes are interspersed through it, with high and fine banks; these abound in fish, and in the autumn are visited by millions of wild fowl. There is, perhaps, no spot in the western country, capable of being more highly cultivated, or of giving support to a more numerous population than this valley" (Brackenridge 1814:186) (Figure 1).

Today we do not know what the people of Cahokia called themselves, or what name they gave to their community because they left no evidence of written records. "Cahokia", the name we give to this once thriving civilization and the term "Cahokians", in reference to its people, comes

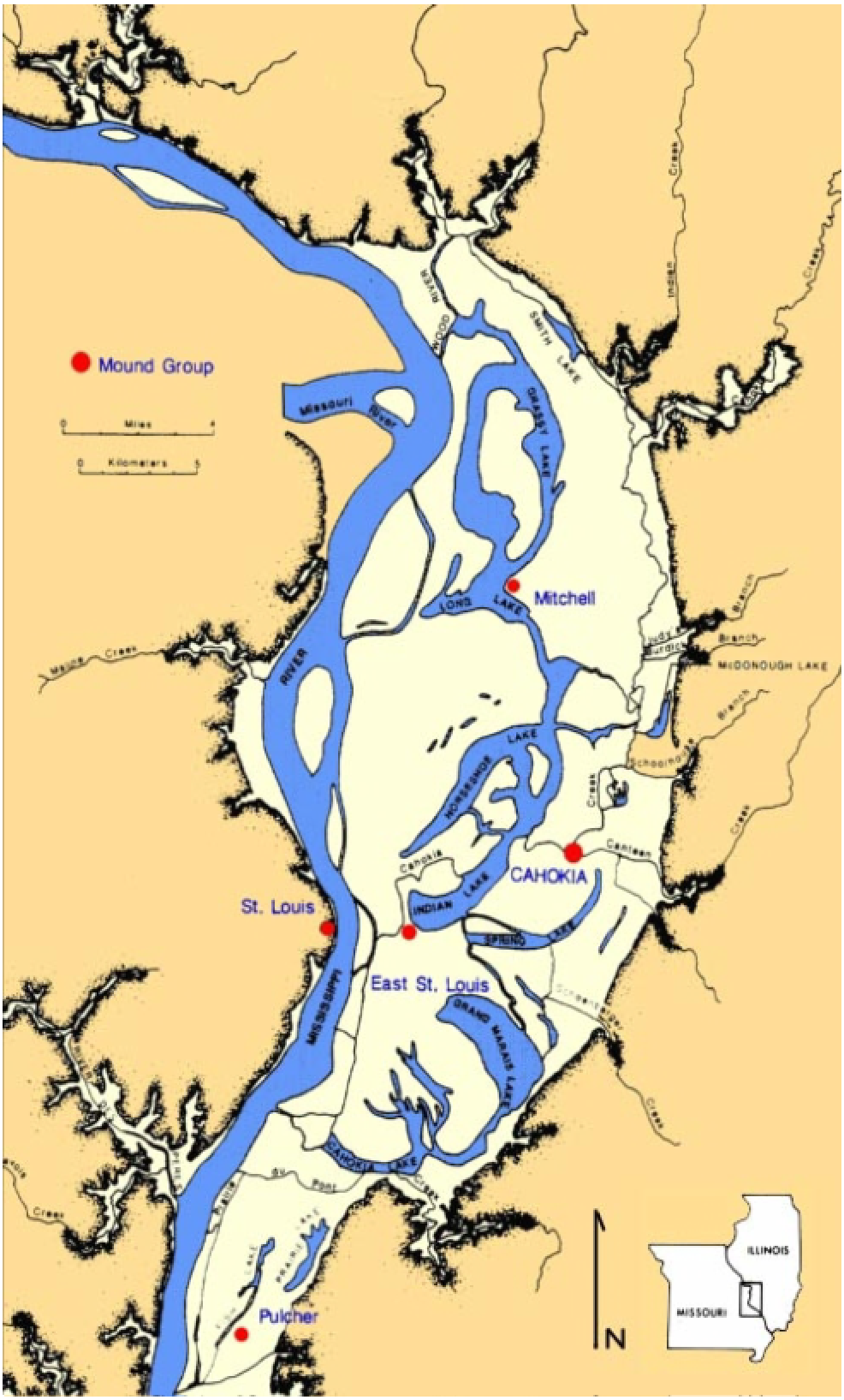

Figure 1. The American Bottom Region ca. 1800 in west-central Illinois and east-central Missouri along the Mississippi River. Source: Mikels Skele, Archaeology Laboratory, Southern Illinois University at Edwardsville.

from a tribe of Indians of the Illinois Confederacy who occupied the area in the 1600s and into the early 1700s. In 1997, Melvin Fowler in his *Cahokia Atlas* stated that, "Although archaeologists have gained more knowledge about the precolumbian history of North America, they have found it impossible to connect known historic tribes with archaeologically known ones" (11). Although Fowler's statement was accurate at the time of the Atlas' publication, recent literature on Cahokia's prehistory has suggested possible connections of the builders of Cahokia's mounds to known historic tribes who share the Dhegiha Siouan language (Diaz-Granados 2000, 2004; Hall 2004). Dhegiha speakers include today's Omaha, Ponca, Kansa, Osage, and Quapaw tribes (Hall 2004:102).

One of the most common systems used by archaeologists today as a way to organize and date prehistoric cultural data, divides eastern North American prehistory into major periods within a given time frame. For example, Cahokia's early occupants are largely associated with the Mississippian period in prehistory, as well as the Late Woodland and Emergent Mississippian periods (Figure 2).

TABLE 1.1
Archaeological Periods in the American Bottom Region

Period	Time Range
Historic	A.D. 1600-present
Oneota	A.D. 1400-1600
Mississippian	A.D. 1000-1400
Emergent Mississippian	A.D. 800-1000
Woodland	
Late Woodland	A.D. 300-800
Middle Woodland	150 B.C.-A.D. 300
Early Woodland	500-150 B.C.
Archaic	ca. 8000-500 B.C.

Figure 2. Archaeological Periods in the American Bottom Region. Source: Fowler 1997:11.

From the information gathered during archaeological investigations, and with the help of dating methods, scientists and archaeologists have determined that Cahokia was inhabited from approximately A.D. 700-1350 (Fowler 1997; Illinois Historic Preservation Agency Pamphlet). Beginning around A.D. 700, groups of Late Woodland Indians began settling in and around

Cahokia, living in small villages, where they hunted, fished, and grew food sources. During the Emergent Mississippian period from around A.D. 800-1000 Cahokia's population grew in size and it social organization became increasingly complex (Fowler 1997:11). Cahokia's fertile soils, abundance of wildlife, and plentiful water sources continued to attract people into the region, and allowed for permanent settlement of the area. By A.D. 1050-1200 Cahokia had become a bustling community center with a population numbering anywhere from approximately 10 to 20 thousand people (Illinois Historic Preservation Agency Pamphlet). It is believed that many of the mound complexes in the American Bottom may have been started at this time (Fowler 1997:11). The ancient settlement of Cahokia encompassed nearly six square miles of land and included approximately 120 mounds constructed with the soil of the earth and built entirely by human hands. The mounds they built served a variety of purposes, the most common being their conical shaped burial mounds, and their rectangular platform mounds, which held housing and building structures. Atop the largest mound at the site, Monks Mound, excavations in the 1960s and 1970s, confirmed the presence of a large building or temple structure measuring 104 feet (32 meters) long and 48 feet (15 meters) wide (Mink 1992:25). This is thought to be one of the largest structures at Cahokia, and undoubtedly the most important building at the site (Fowler 1997: 100). This particular building structure must have belonged to Cahokia's chief leader, or a person holding the highest position in the society.

Unfortunately, sometime in the late 1300s those who once called Cahokia home completely abandoned their city. What they left behind was their earthen mounds and traces of their existence everywhere present on the landscape. It is now up to the archaeologists as well as amateurs interested in the topic to unravel the secrets of Cahokia's past and its people. One of the biggest challenges archaeologists face today is finding answers to what caused Cahokia's decline and ultimately what eventually led to the total abandonment of their city.

The largest mound at Cahokia, Monks Mound, sits at the center of the site, one early spectator calling it, "easily one of the Seven Wonders of America" (Cahokia Mounds Association 1917:5)

because of its size, grandeur, and ability to capture the imaginations of many. Other mounds on the site vary in height; some appear as merely a small rise on the landscape, while other mounds are much larger in size.

Since the early 1800s travelers and scholars have attempted to describe Monks Mound's size and dimensions. An accurate measurement given in Melvin Fowler's *Cahokia Atlas* depicts Monks Mound as 1,000 feet (305 meters) long and 775 feet (236 meters) wide. Its highest point reaches 100 feet, or 30.5 meters from the surface of the ground to its summit (Fowler 1997:8). The base of the mound covers an area over twelve acres (Putman and Patrick 1880:473). One astonishing fact is that Monks Mound has a larger base circumference than the Great Pyramid of Khufu in Egypt or the Pyramid of the Sun at Teotihuacán in Mexico (Young and Fowler 2000:2). To give the reader a better idea of the size of this mound, a casual stroll along the entire base of the mound takes a little over twelve minutes to complete, and a leisurely climb up the modern day concrete stairs located at the mound's south face takes nearly two and a half tiring minutes before reaching the top. For a mound of earth, that's a long walk to conquer! No other mound in North America can be compared with this one. It's no wonder Monks Mound has intrigued the imagination and captured the eyes of its spectators since its completion sometime in the twelfth century (Figure 3).

Fortunately, this incredible piece of work, the celebrated Monks Mound, is still in existence today. In fact, it is an utmost delight to say that many of the mounds at Cahokia are intact and preserved for all to see. These same feelings of "awe" and "excitement" experienced nearly two hundred years ago by some of the first visitors to the mounds can still be felt by the present generation of observers, both young and old, and from near and far away places. What is equally exciting is that future generations for years to come will be able to enjoy Cahokia's beauty and serene atmosphere.

Presently, the Cahokia Mounds State Historic Site, owned by the state of Illinois and managed by the Illinois Historic Preservation Agency, includes 2200 acres of the central portion of the site

Figure 3. Monks Mound's south face. Photograph taken spring, 2008 facing north. The vehicle driving west bound on Collinsville Road gives the reader an idea of the size of this mound.

and contains 70 of the remaining 80 mounds, including the famous Monks Mound (Illinois Historic Preservation Agency Pamphlet). On July 19, 1964 Cahokia Mounds was designated a U.S. National Historic Landmark, a title only given to places in the United States showing extraordinary value or quality in illustrating or interpreting the heritage of the United States (National Historic Landmarks Program Online web page). In 1982 Cahokia Mounds was recognized as a World Heritage Site by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) for its importance to North American prehistory. Seven years later in September 1989, Cahokia's 33,000 square foot (3066 sq. meter) Interpretive Center was opened to the public to assist others in understanding and interpreting Cahokia's past. Since then the museum continues to attract hundreds of thousands of visitors from around the world each year (Figure 4).

Figure 4. The Cahokia Mounds Interpretive Center. Photograph taken in the fall, 2007.

This esteemed status Cahokia maintains today is nearly as impressive as the civilization that once thrived there, but little do most people realize that not long ago this wasn't the case. Less than 100 years ago Cahokia was an unprotected site, in constant danger from the local farmer's plow and the industrial movement into the area.

The United States during the 1800s and into the early 1900s was advancing daily as a country with its growing cities and new technological advancements. Regrettably this early period in America often carried with it an "out with the old and in with the new" type of attitude. This mindset, along with feelings of uncertainty as to what the earthen mounds represented, and an overall lack of knowledge regarding the origins behind the mounds, left any mound standing in the way of development in serious danger. Mounds existing on private property became targets for destruction simply if a farmer found them a hindrance to his work.

In the mid to late 1800s, the mounds that once existed as a group in St. Louis were leveled to the ground, followed by the mounds in East St. Louis, to make room for housing and industrial developments. As early as the 1850s, portions of the largest mound in St. Louis, known as Big Mound, had begun to be removed to make way for the construction of roads and sidewalks (O'Brien and Wood 1998:286). By the 1860s, most of the mound was destroyed and its remains were carried away to create bricks for buildings and used as a roadbed by the Missouri Railroad Company (O'Brien and Wood 1998:286). Luckily, various mound groups further east, including the Mitchell group (north of Cahokia), the Emerald group (east of Cahokia), the Pulcher group (southwest of Cahokia), and Cahokia, remained for the most part intact because they existed in a more rural setting (Kelly 2000:9) (Figure 1). Nevertheless, as time pressed forward, the urbanization of St. Louis began to expand further east. It quickly became apparent that the monster of progress that leveled the mounds in St. Louis and East St. Louis would not hesitate in devouring Cahokia as well as other smaller prehistoric centers that stood in its way. In some instances progress had already crept in, but luckily there were some local citizens who realized Cahokia's significance and decided to take action before it was too late. In 1925, largely due to

localized efforts, 144.4 acres of Cahokia land, which included Monks Mound, was purchased by the state of Illinois. In that very moment a Cahokia Mounds State Park was established (later, in 1976, the park was renamed The Cahokia Mounds State Historic Site to emphasize its cultural importance). Prior to the park's establishment, and from then onward, Cahokia has persevered through a roller coaster of events leading up to more recent times.

When I first began preparing for the research for this project, and what would later become the writing for this thesis paper, my original objective was to write on Cahokia's history beginning around the year 1800, when the site was first discovered by early mapmakers and explorers. From there I planned to proceed in covering each succeeding decade of Cahokia events in thorough detail, finishing only after writing on the more current events taking place at the site in the 21st century. I knew this was going to be a hefty task, but it wasn't until I actually started to delve into the research that I began to more fully grasp the magnitude of information my topic choice demanded. Before long, my paper outline had evolved into a seemingly endless listing of events that took place at Cahokia through the years. It soon became apparent that I would in no way be able to cover every aspect and piece of Cahokia's history in only two semesters, and in 60 pages, the expected time frame and approximate length requirements assigned to the project. After much thought and some discussion with my thesis advisor, we agreed it would be best to narrow my focus, and instead provide the reader with a detailed overview of happenings at Cahokia beginning around 1800 through to the 1940s, encompassing a total of approximately 150 years of Cahokia Mound's history. In doing so, I will be keeping to a close chronological order of events, and covering what I feel to be the most significant events of Cahokia history within this time frame. Afterwards, and in brief, I will touch on some noteworthy activities taking place at the site post 1940s.

In the process of telling Cahokia's story I find it necessary to shed some light on a number of individuals who have in some way contributed to the well being and interpretation of the site.

Typically, when a visitor enters the premises of Cahokia Mounds, and then visits the site's Interpretive Center, they are given an abundance of information on what we know of Cahokia's inhabitants; from the way their civilization once appeared, to the many types of artifacts they crafted, information on their sun calendar (the woodhenge), a glimpse of their day to day activities, and the list goes on. At the same time visitors have the freedom to walk the site's grounds and see Cahokia's mounds up close and personal. In addition, Cahokia's guests are given the opportunity to climb 100 feet above the surrounding plain to the summit of the largest mound at the site, Monks Mound, only to peer out for miles into the distance and visualize what it must have been like to live in such a place. What often times gets overlooked by the typical visitor is that this entire "Cahokia experience" would not have been possible nor would such an opportunity exist without the tireless efforts and countless sacrifices made by those individuals who cared so deeply for Cahokia's future and preservation, beginning with the localized efforts in the late 1800s and early 1900s. Today these feelings of affection and concern for Cahokia's future have not gone astray. There are numerous volunteers, workers, students, laypersons, and scholars who have in some way contributed to the well being of the site. Some individuals have devoted nearly their entire careers to its study, while others have volunteered their time in giving site tours or helping with field excavations. Again, I will in no way be able to credit even a fraction of these people, but I would hope I could be successful in naming at least some of these individuals within this 150 year time frame who have made a lasting impression on this topic.

Finally, I would like to touch on some of the present issues the site is faced with today. For instance, not everyone is aware that approximately 1,600 acres of prehistoric Cahokia land remains unprotected and is at risk for commercial development. If this were to occur, it would result in not only a tremendous loss of our cultural heritage, but also a loss of invaluable information that could later assist archaeologists in understanding the past life ways of these people.

Above all else, my greatest hope for this paper is that by showing the value of past efforts and the results of both individual and group dedication, and then by discussing some current happenings at the site, it would pique the readers' interest with the desire to learn more, and most importantly ignite a motivation to get involved and help preserve this precious legacy we have come to know as Cahokia Mounds.

CHAPTER 1

Cahokia's Earliest Visitors and Explorers

There were those white men who had undoubtedly seen the Great Mounds at Cahokia after European arrival to the New World, more specifically North America after the 1500s, but there was no written documentation of the mounds at Cahokia until the latter half of the 1700s and into the early 1800s. The American Indians who built their mounds at Cahokia sometime in the eleventh and twelfth century had completely abandoned their city by the end of the fourteenth century. As a result their mounds sat in silence until their rediscovery some 400 years later by some of the first explorers and cartographers into the area. Those who witnessed the mounds at Cahokia prior to their "rediscovery" may have wondered what these impressive earthworks were as they passed by in admiration, but no detailed written record of Cahokia's mounds was documented until 1811.

General George Collot, who explored the geography of the western United States, drew the earliest known map of the Cahokia region in 1796 (Figure 5). In his map, he shows mounds denoted by the words "Indian Ancient Tombs". The mounds he depicts, however, are not of Cahokia, but of a group of mounds today known as the Pulcher site (Fowler 1969: 6), located seven miles south of the present day city of Cahokia, Illinois. In the area where Cahokia's mounds should be on Collot's map, exists an open area of land between two creeks. It has been

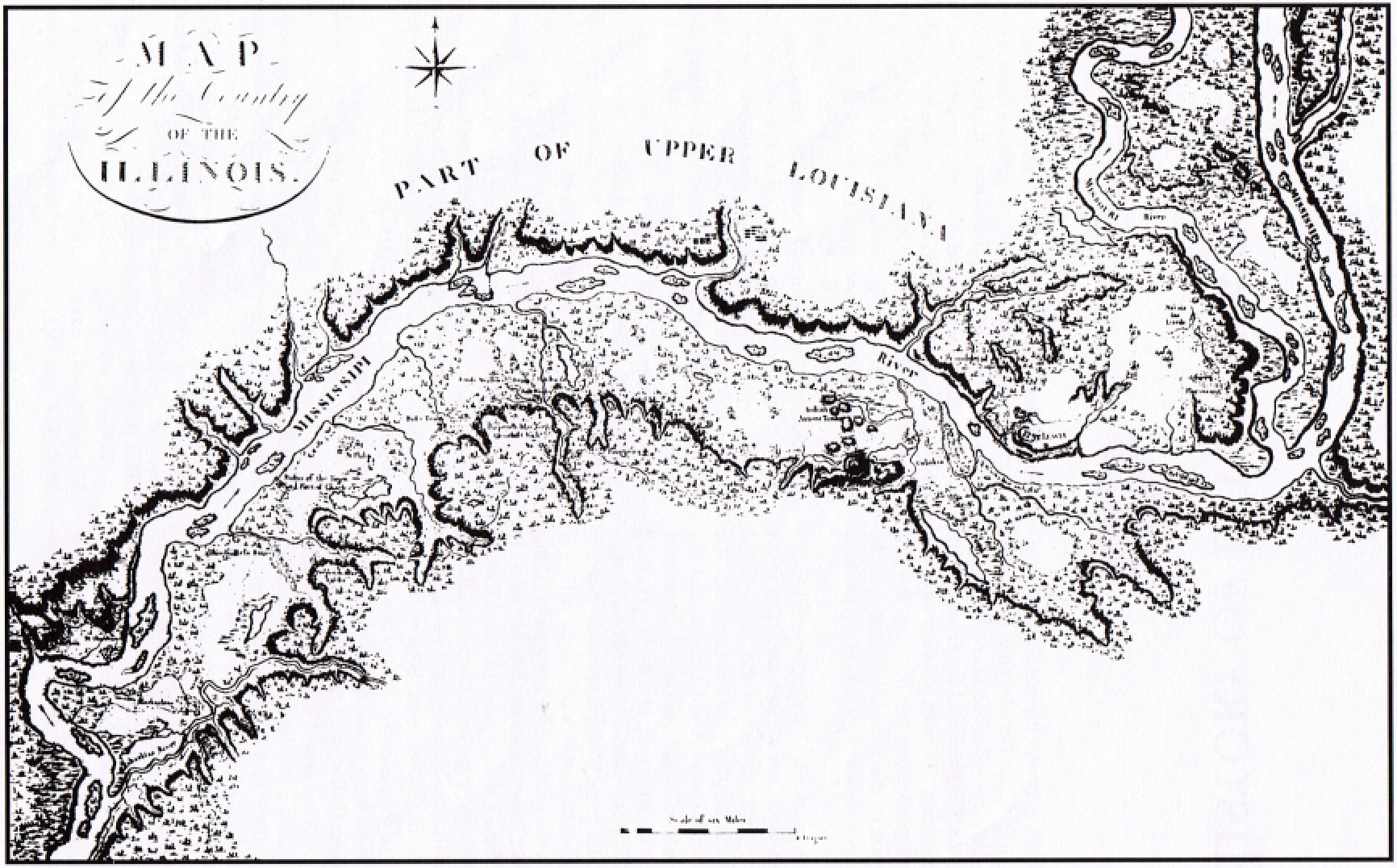

Figure 5. A portion of Collot's map of the Mississippi River Valley near St. Louis, Missouri. Drawn around 1796. The mounds labeled "Indian Ancient Tombs" on his map are probably mounds at the Pulcher site southwest of Cahokia Mounds. North arrow points west on his map. Source: Fowler 1997:14.

thought that during this early period in history, Cahokia was off the beaten path, situated in an area not often traveled by the early mapmakers and explorers. Early French explorers such as Marquette and LaSalle, like Collot, passed within very close distance to the mounds, but they too gave no mention of them in their writings (Fowler 1969:7). Surely, had these men seen the mounds at Cahokia, they would have documented them. The fact that they didn't is a good indication that this particular location east of the Mississippi wasn't easily accessible to them.

Another mapmaker of Collot's time was French engineer Nicolas de Finiels. During the course of 1797-1798 Finiels drafted a map of the central Mississippi River Valley and in 1803 wrote a lengthy account of his observations of daily life in Upper Louisiana[1]. It has been assumed that he was the one who initiated the entire project, as there are no records or documentation of Finiels being ordered to draft the map (Ekberg and Foley 1989:5). On his map, he shows an area of land marked "anciens tombe aux des sauvages" demarcating some Indian mounds across the Mississippi River east of St. Louis, but unfortunately he did not give any description of these mounds he witnessed, and therefore we cannot positively attribute them to Cahokia.

The next brief record of Cahokia Mounds was in a field notebook of a surveyor named John Messinger in 1808. What brought Messinger to the area was to adjust a town line that today is the Madison and St. Clair county line in Illinois. As one of the requirements for his work, he was responsible for documenting any features of the landscape that might have been pertinent to the purpose of the land survey (Hall 1991:3). In his field notes he wrote, "two large Mounds Bearing N.E. in the Edge of a large Prairie." One of the mounds he spoke of was likely the second largest

[1] Nicolas de Finiels' account of Upper Louisiana appeared in print for the first time in 1989 in a book titled *An Account of Upper Louisiana.* Finiels' original accounts were written in French in 1803 and later translated into English by Charles J. Ekberg before its publication. Today Finiels' original manuscript is located in the John Francis McDermott Collection in the archives of the Lovejoy Library at Southern Illinois University-Edwardsville. The original map is located in the map division of the Service Historique de la Marine in the chateâu of Vincennes outside Paris. The map was drawn in six panels and measures 68cm by 262cm.

mound at Cahokia known as the Powell Mound that once stood at the western edge of the site. Messinger continued:

> Twenty four or more of those mounds in site at one View—one whose base is nearly 6 acres by Estimation—& 100 Feet in Height—Others of Various sizes from 6, to forty feet in height, & Various forms—some round, some oblong or Rect. angled Parallelograms and others irregular—All covered with Simptoms of ancient Ruins—Soil first Rate (Hall 1991:3).

The mound Messinger referred to as 100 feet in height was none other than Monks Mound, but instead of his estimate of the base as six acres, a more accurate number is sixteen acres (Hall 1991:3). Three years after Messinger's writings, Cahokia was finally given some recognition. In 1811, one early visitor, Henry Marie Brackenridge, voyaged to Cahokia and wrote of his travels in his published work *Views of the Louisiana.* He is credited as writing the first known detailed account of Cahokia Mounds, whereas Messinger's writings gave only a scant mention of the mounds in his survey notes. Although the accounts of Brackenridge's journey have been reported time and time again in nearly every work ever written on Cahokia's early history, Brackenridge's story marks Cahokia's initial "discovery" in American history, and therefore his story must be reiterated.

Henry Marie Brackenridge, originally from Pittsburgh, Pennsylvania, was a scholar of his time, excelling in several occupations in the course of his lifetime; titles including lawyer, judge, and American writer (Keller 1956). His passions included traveling and studying the prehistoric earthworks that were a part of the North American landscape. A number of these earthworks he examined were situated in St. Louis, Missouri. St. Louis at that time was often referred to as "Mound City" because of the prevalence of earthen mounds within the city limits (Milner 2004:18). Brackenridge frequently visited the mounds in St. Louis, and while in the city, he had heard of some large earthen mounds situated just a short distance across the Mississippi River where a group of Trappist Monks were living. This sounded appealing to Brackenridge, so he planned the daylong journey to Cahokia to visit the mounds and the monks who resided there.

In the fall of 1811 Brackenridge crossed the Mississippi River from St. Louis by ferry and landed in Illinoistown, which is now present-day East St. Louis. From there he began his trek, and in a short time found himself amidst a group of mounds scattered about the plain. Finding the largest, he climbed to its summit. Once reaching the top, he counted 45 mounds and other smaller earthen elevations rising from the surface, and extending across the landscape for nearly a mile (Brackenridge 1814:187). He noticed too, the mounds of this group were placed in such a way that they formed the shape of a semicircle.

The mounds Brackenridge witnessed were mounds that once existed in the location of present day East St. Louis. Similarly to the mounds in St. Louis, the East St. Louis Mound Group, some years after Brackenridge's visit, were mostly destroyed by city developments; but not completely. More recent investigations in East St. Louis by archaeologist Dr. John E. Kelly and other individuals have determined that numerous archaeological sites still exist buried beneath the surface of the modern day city (Powell Archaeological Research Center Newsletter 2008). Fortunately, efforts have, and are presently being made to preserve portions of the East St. Louis Mound Center Brackenridge spoke of in 1811.

From there Brackenridge continued by foot along the bank of the Cahokia Creek, the same path that Collinsville Road (formerly U.S. 40) follows today. During his walk he viewed, at least for the most part, an unsettled land of mostly prairie, scattered trees, and meandering waterways. In present times, one can still see remnants of this landscape, but hardly so. Today, while driving from East St. Louis on Collinsville Road towards Cahokia Mounds, it is impossible to miss some of the modern constructions built since Brackenridge's time. Some of these include a number of Mexican restaurants, gas stations, a flea market, a mobile home park, motels, a laundry mat, a carpet outlet, subdivisions, and an ice company to name a few.

Brackenridge continued on his route, spotting eight more mounds, before setting foot at the greatest mound of them all. In his account he wrote:

> When I reached the foot of the principle mound; I was struck with a

> degree of astonishment, not unlike that which is experienced in contemplating the Egyptian pyramids. What a stupendous pile of earth! To heap up such a mass must have required years, and the labor of thousands…Were it not for the regularity and design which it manifests, the circumstances of its being on alluvial ground, and the other mounds scattered around it, we could scarcely believe it the work of human hands (Brackenridge 1814:187).

The Trappist Monks Brackenridge had heard about back in St. Louis were busy at work at the time of his arrival. Some of the monks were shaping timber, while others were carrying corn from their fields and into storage.

The monks Brackenridge encountered, were originally from France, later held residence in Kentucky, then Florissant, Missouri, and finally set up their monastery along the banks of the Cahokia Creek at Cahokia around 1810, one year prior to Brackenridge's visit. As a part of their religious order, the monks devoted their lives to work and prayer. They were expected to live a life of silence, with little possessions, and minimal contact from the outside world, with the sole intention of serving God. This being the case, Brackenridge was relieved when he found two men who were able to speak with him. One was a younger man employed by the monks, but not attached to the society, and the second was Father Joseph, who at the time was the leading authority over the monastery. Father Joseph, according to Brackenridge, spoke intelligently, and invited him into the monk's watchmaker shop; one of the many trades carried on by the monk's to support their institution. Brackenridge did not detail his conversations with the two men, but he did mention that he was fed a dinner consisting chiefly of vegetables before returning to St. Louis (Brackenridge 1814:289). While at Cahokia, Brackenridge documented his encounter with the monks and their living quarters:

> The buildings which the Trappists at present occupy, are merely temporary: they consist of four or five cabins, on a mound fifty yards [?] high ,and which is perhaps one hundred and fifty feet square. Their other buildings, cribs, stables, &c. ten or fifteen in number, are scattered about on the plain below. I was informed that they intended to build on the terrace of the large mound; this will produce a fine effect, it will be seen five or six miles across the plain, and from some points of view ten or twelve. They have about one hundred acres enclosed in three different fields, including the large mound and several others… I ascended the mound which contains the dwellings. This is nearly 25 feet in height: the ascent rendered easy by a slanting road. I wandered about

> here for some time, in expectation of being noticed by some one; it was in vain that I nodded to the reverend fathers, or peeped into their cabins [Brackenridge 1814:287-288,query added].

Still today we cannot say with one hundred percent certainty the exact location where the monks built their cabins. At the time of Brackenridge's visit, the monks had built structures on top of one of the smaller mounds at Cahokia. Brackenridge witnessed the monks using the largest mound as a place for gardening and growing wheat, but never did he mention them living on this mound, only that they had planned to. The mound that was most likely occupied by the monks is a mound located immediately southwest of the largest, Mound 48 (Bushnell 1904:9; 1922:97). One reason it is believed the monks lived there is that Mound 48 has a platform summit large enough to hold their cabins, and also there is evidence of a pathway on the south face of the mound that correlates with Brackenridge's writings of a slanting road up the side (Fowler 1997:16). A few individuals who visited the mounds in the mid 1800s had other beliefs about where the monks lived, but keep in mind the monks were no longer living at Cahokia at the time of their arrival and their assumptions were based solely on hearsay. One explorer John Casper Wild (1948 [1841]) stated, "To the west some two hundred yards (of the largest), on a small mound, was formerly the principal residence of a community of Monks of the order of La Trappe…" (51). One visitor to the mounds, G.W. Featherstonhaugh (1844) reported, "On the west side, and near to the large barrow—which the neighbouring people call *Monk's Mound*—is a smaller one, where some monks of La Trappe once fixed their residence when they took refuge in this country…" (266-267). This mound directly west of Monks Mound referred to by Wild and Featherstonhaugh, today is Mound 41. It is probably unlikely though that the monks lived there because the top of the mound has a smaller surface area and would have only been able to hold a few cabins (Fowler 1997:16) (Figure 6). Another visitor, Edmund Flagg (1838), believed that first the monks lived on a smaller mound and afterwards took up residence on Monks Mound. In his writings Flagg wrote:

> The buildings which they occupied were never of a very durable character, but

> consisted of about half a dozen large structures of logs, on the summit of the mound about fifty yards to the right of the largest. This is twenty feet in height, and upward of a hundred and fifty feet square…Subsequently they erected an extensive structure upon the terrace of the principal mound, and cultivated its soil for a kitchen-garden, while the area of the summit was sown with wheat" (1838:169-170).

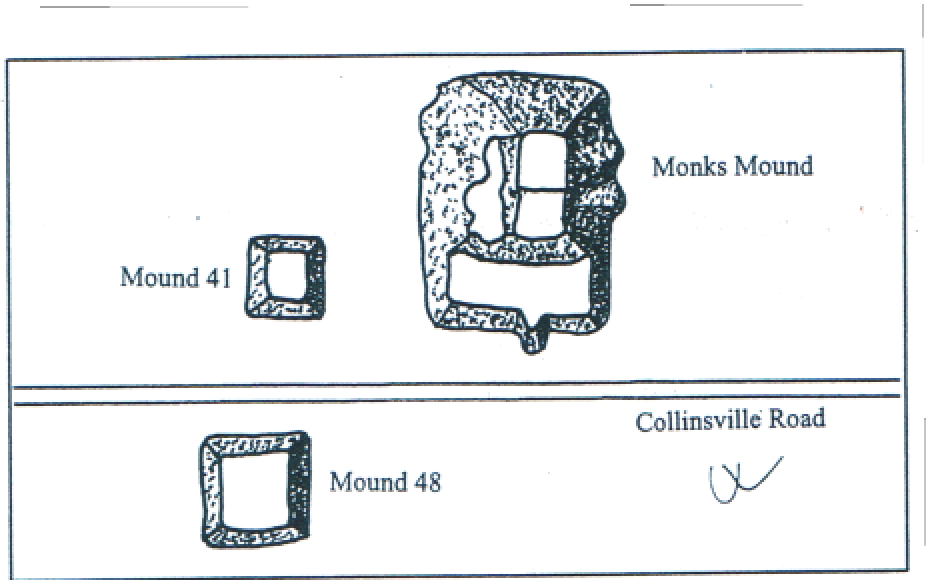

Figure 6. Drawing showing two mounds west and southwest of Monks Mound where the Trappist Monks may have taken up residence. Source: *Cahokian*, summer 1993:8.

Regardless of where the monks lived, the largest mound at Cahokia assumed the name Monks Mound, due to the notion that the Trappist Monks once lived on its terraces and worked in close proximity to the mound. Hopefully someday in the near future archaeological excavations will be conducted on Mounds 48 and 41, and the location of the monks living quarters may be realized once and for all.

In Brackenridge's writings he revealed his thoughts about the land and its prehistoric inhabitants:

> There is perhaps no spot in the western country, capable of being more highly cultivated, or of giving support to a more numerous population than this valley. If any vestige of ancient population were to be found, this would be the place to search for it—accordingly, this tract, as also the bank of the river on the western side, exhibits proofs of an immense population. If the city of Philadelphia and its environs, were deserted, there would not be more numerous traces of human existence. The great number of mounds, and the astonishing quantity of human bones, everywhere dug up, or found on the surface of the ground, with a thousand other appearances, announce that this valley was at one period, filled with

> habitations and villages. The whole face of the bluff, or hill which bounds it to the east, appears to have been a continued burial ground…I concluded, that a very populous town had once existed here, similar to those of Mexico, described by the first conquerors. The mounds were sites of temples, or monuments to the great men. It is evident, this could have never have been the work of thinly scattered tribes (Brackenridge1814:186-188).

Despite all of the evidence that Cahokia was once a densely populated prehistoric civilization, full of cultural antiquity, it had failed to gain any attention or publicity from the wider public. In 1811, St. Louis county had a population of about 5,600 residents (Keller 1956:107), but probably only a handful of those people had ever heard of the mounds, and an even smaller percentage of those actually visited Cahokia. The vast majority of people were both unaware of the mounds' existence and as any person would be in those days, they were more concerned about securing a life for themselves in this still largely unsettled new world than worrying about the past lives of those who came before them. Brackenridge was one of the first to notice this lack of recognition of the mounds, sharing his concerns in a letter to his friend and then president Thomas Jefferson:

> When I examined it in 1811, I was astonished that this stupendous monument of antiquity should have been unnoticed by any traveler: I afterwards published an account in the newspapers of St. Louis, detailing its dimensions, describing its form, position &c. but this, which I…considered a discovery, attracted no notice (Brackenridge 1813:155).

This grand discovery had attracted little to no notice, and it would be a long time before Cahokia would receive the attention it deserved. But Brackenridge's writings were a start. He recognized the significance of the mounds and wanting to share his knowledge, published articles about them in the St. Louis newspapers, but even then nothing much came of it.

The next recorded sighting of Cahokia Mounds was in 1819 by an expedition headed by Major Stephen Long. Long was one of the most productive explorers of his time. From 1816 to 1823 he undertook a total of five expeditions covering over 26,000 miles of the North American terrain. While his steamboat was seeking repair in St. Louis, he and his crewmembers visited Cahokia on more than one occasion (Fowler 1997:16). It is probable that Long learned of the mounds at Cahokia from someone living in St. Louis who was familiar with them. During one of

their visits, Long and his crewmembers counted seventy-five mounds, including Monks Mound, which at the time was overgrown with heavy brush and weeds (Long 1823:66). Like Brackenridge, they too were disheartened that the mounds had gained no notice, and in Long's journal he reported, "The survey of these productions of human industry, these monuments without inscription, commemorating the existence of a people once numerous and powerful, but no longer known or remembered, never fails, though often repeated, to produce an impression of sadness" (Long 1823:66). Long's expedition recognized the misfortune of the forgotten mounds, but even so, he and his crew departed and continued their journey elsewhere.

As the 1800s pressed onward, the number of visitors to Cahokia slowly increased. Two of those visitors were Reverend Timothy Flint and his son Micah in 1825. Timothy Flint was a pastor and writer who lived and traveled throughout the Mississippi Valley from 1815 to 1825. While traveling, he wrote of his experiences and observations in what became *Recollections of the Last Ten Years* published in 1826. In Flint's writing he described some of the mounds he witnessed, and stated that the mounds, "near the Cahokia…must have been works of great labour" (Flint 1826:165). Though Flint did not write much else about the mounds at Cahokia, his son Micah, during their visit, was so taken by the place that he wrote a poem about it titled "On the Mounds in the Cahokia Prairie, Illinois" (Flint 1826:167-169) (Figure 7). Pleased with Micah's writing, Rev. Flint included his son's poem in his book *Recollections*.

Charles Joseph LaTrobe, originally from London, ventured to North America in 1832, and described his travels throughout the country in his two-volume publication titled *The Rambler in North America*. Like many of his predecessors, LaTrobe took full advantage of his stay in St. Louis. While in the city, LaTrobe repeatedly crossed the river to view the mounds at Cahokia. He was fascinated with the mounds, especially Monks Mound, and spoke of his travels and his

Figure 7. Poem by Timothy Flint's son Micah, "On the Mounds in the Cahokia Prairie, Illinois" written in 1825. Source: Flint 1826:167-169.

LINES

ON THE MOUNDS IN THE CAHOKIA PRAIRIE, ILLINOIS.

The sun's last rays were fading from the west,
The deepening shade stole slowly o'er the plain,
The evening breeze had lulled itself to rest,
And all was silence—save the mournful strain
With which the widowed turtle wooed in vain
Her absent lover to her lonely nest.

Now, one by one emerging to the sight,
The brighter stars assumed their seats on high;
The moon's pale crescent glowed serenely bright,
As the last twilight fled along the sky,
And all her train, in cloudless majesty,
Were glittering on the dark blue vault of night.

I lingered, by some soft enchantment bound,
And gazed enraptured on the lovely scene;
From the dark summit of an Indian mound
I saw the plain outspread in living green,
Its fringe of cliffs was in the distance seen,
And the dark line of forest sweeping round.

I saw the lesser mounds which round me rose;
Each was a giant heap of mouldering clay;
There slept the warriors, women, friends, and foes,
There side by side the rival chieftains lay;
And mighty tribes, swept from the face of day,
Forgot their wars and found a long repose.

Ye mouldering relics of departed years,
Your names have perished; not a trace remains,
Save where the grass-grown mound its summit rears
From the green bosom of your native plains;
Say, do your spirits wear oblivion's chains?
Did death forever quench your hopes and fears?

Or live they shrined in some congenial form?
What if the swan who leaves her summer nest
Among the northern lakes, and mounts the storm
To wing her rapid flight to climes more blest,
Should hover o'er the very spot where rest
The crumbling bones—once with her spirit warm.

What if the song, so soft, so sweet, so clear,
Whose music fell so gently from on high,
And which, enraptured, I have stopped to hear,
Gazing in vain upon the cloudless sky—
Was their own soft funereal melody
While lingering o'er the scenes that once were dear

Or did those fairy hopes of future bliss,
Which simple nature to your bosoms gave,
Find other worlds with fairer skies than this
Beyond the gloomy portals of the grave,
In whose bright climes the virtuous and the brave
Rest from their toils, and all their cares dismiss?—

Where the great hunter still pursues the chase,
And o'er the sunny mountains tracks the deer,
Or where he finds each long extinguished race,
And sees once more the mighty mammoth rear
The giant form which lies imbedded here,
Of other years the sole remaining trace.

Or it may be that still ye linger near
The sleeping ashes, once your dearest pride;
And could your forms to mortal eye appear,
Or the dark veil of death be thrown aside,
Then might I see your restless shadows glide
With watchful care around these relics dear.

If so, forgive the rude unhallowed feet
Which trod so thoughtless o'er your mighty dead;
I would not thus profane their lone retreat,
Nor trample where the sleeping warrior's head
Lay pillowed on his everlasting bed
Age after age, still sunk in slumbers sweet.

Farewell—and may you still in peace repose,
Still o'er you may the flowers untrodden bloom,
And softly wave to every breeze that blows,
Casting their fragrance on each lonely tomb
In which your tribes sleep in earth's common womb,
And mingle with the clay from which they rose.
March 10, 1825.

fascination with the largest mound:

> After riding for about four miles over the sod of the Prairie, we reached the principle group, consisting of sixteen or eighteen, occupying an extensive area to the south and west of the Cahokia creek, on the edge of which rises the principal Mound. Standing before it, it required all the credulity I was able to muster, to persuade myself that the immense mass before me—with its slopes waving with grass and brushwood, and gullied by the rains—allowing sufficient area for a small farm with the necessary tenements—and with sides clothed by the tall forest—could be the work of human hands. How many years, how many hands would suffice for the erection of such a mass! …The Big Mound on the Cahokia, large as it is, is the work of man, and of that we became convinced, beyond all doubt, by an hour's careful and jealous inspection (LaTrobe 1835, Vol. 2:181-182).

A short time after LaTrobe's departure from the mounds another explorer of the day named Edmund Flagg visited there. After Flagg's graduation from Bowdoin College in Maine, he planned a two-year journey to study the Western Prairie of North America, beginning in 1836. Before his leave, an editor from the *Louisville Journal* approached Flagg after hearing of his proposed journey, and asked him to write of his explorations and send them to him for publication in his paper. Flagg agreed, and during his study of the frontier, he dispatched writings in letterform, which appeared regularly in the Journal under the heading "Sketches of a Traveller". While absent, Flagg's written observations gained popularity and upon returning he was urged by friends to turn both his published and unpublished writings of his travels into a book. From this came Flagg's two-volume set entitled *The Far West: Or, A Tour Beyond the Mountains.* In volume I, he included writings about St. Louis and its mounds, but more importantly for our purpose, he wrote of his voyage to Cahokia.

Flagg's journey, when compared to Brackenridge's, was a very similar one, with only a few exceptions. First, there was a 25-year time span between the two, which allowed for a slight change in scenery, particularly at the summit of Monks Mound, which I will expand on shortly. Secondly, Flagg came to Cahokia in mid-summer, where Brackenridge arrived in the fall. And lastly, Brackenridge came by way of a ferryboat and foot, while Flagg crossed the Mississippi by ferry and continued on horseback. Besides these subtle differences, the beauty of the landscape, including Monks Mound, produced the same feelings of awe and wonder in both accounts. In

fact, Flagg was so taken by Cahokia and Monks Mound that he wrote more than a dozen pages solely on the topic. Some of what Flagg felt towards Monks Mound is included here:

> After a delightful drive of half an hour the second group of eminences, known as the "Cantine Mounds," appeared upon the prairie at a distance of three or four miles, the celebrated "Monks Hill," largest monument of the kind yet discovered in North America, heaving up its giant, forest-clothed form in the midst. What are the reflections to which this stupendous earth-heap gives birth? What the associations which throng the excited fancy? What a field for conjecture! What a boundless range for the workings of imagination! What eye can view this venerable monument of the past, this mighty landmark in the lapse of ages, this gray chronicler of hoary centuries, and turn away uninterested? …when he has examined the soil of which it is composed, and has discovered it to be uniformly, throughout the entire mass, of the same mellow and friable species as that of the prairie at its base; and when he has listened with scrutiny to the facts which an examination of its depths has thrown to light of its nature and its contents, he is compelled, however reluctantly, yet without a doubt, to declare that the gigantic pile is incontestably the WORKMANSHIP OF MAN'S HAND (Flagg 1838:158-160,emphasis in original).

Flagg continued on in his writings, boasting about the mound as if he had just come across the rarest of gems, "How large an army of labourers, without the use of iron utensils, as we have every reason to suppose was the case, would be required for scraping up from the prairie's surface this huge pile; and how many years would suffice for its completion?" (Flagg 1838:164). During his visit, besides discussing and reflecting on the incredulity of Monks Mound, he spoke too about the current situation at the summit of the mound, which at the time of Flagg's visit was owned by a T. Amos Hill: "the farmhouse, with its various structures, its garden, and orchard, and *well* rising upon the broad area of the summit, and the carriage pathway winding up from the base…" (Flagg 1838:159).

T. Amos Hill purchased Monks Mound and a small tract of land surrounding the mound in 1831. Prior to his purchase, Monks Mound and the surrounding land was in the possession of Nicholas Jarrot, whose name was titled to the land in December of 1809 (Fowler1997:15). According to *A Chronology of Early Land Transactions in the Monks Mound Area*, Jarrot had purchased the 400-acre tract of land containing Monks Mound for $60 dollars from the heirs of Jean B. Gonville, who settled on the land around 1783 (Hammes 1987:89). Jarrot was apparently

a man of wealth, because by 1800 he reportedly owned 25,000 acres of land in St. Clair, Madison, and Monroe County in Illinois and lived in a brick mansion in the town of Cahokia ("Lewis and Clark in the Illinois Country" Online article presented by the Illinois State Museum). The Jarrot mansion in the city of Cahokia, Illinois is presently intact and today the exterior of the house can be viewed. The inside, however, is only opened to the public on very special occasions.

When the Trappist Monks arrived at Cahokia, Jarrot had donated a large tract of land to them, including some of the mounds for land cultivation, their living quarters, and for their building structures. Unfortunately a few years later some of the monks became ill, and when unable to recover after a period of time, they re-conveyed the land to Jarrot and returned to France around 1816 (Wild1948 [1841]:55). Later, in 1831 the land was purchased by T. Amos Hill who built his home and other outbuildings on Monks Mound's third terrace. In order to make his extended stay more comfortable, Hill cut a road on the west face of the mound, leading from the base to the summit, and dug a well for his water on the second terrace. The well Hill dug penetrated deep into the mound and during Flagg's visit he learned from inquiry that when the well was dug, several fragments of pottery, decayed ears of corn, and other articles of debris were discovered and thrown up to the surface from a depth of 65 feet (Flagg 1838:167).

Apparently both Mr. and Mrs. Hill lived on Monks Mound for a total of twenty-five years, from 1831 to 1856 (DeHass 1869:297-298). When Mr. Hill died in 1859, his body was buried at the northwest corner of Monks Mound's summit, but it appears the Hill's had moved off of Monks Mound prior to his death. It is very possible Mr. Hill had asked to be buried on the mound prior to his passing. Following Hill's death, Mrs. Hill continued to reside near Collinsville in close proximity to the mounds (DeHass 1869:297-298).

The mid 1800s brought with it a few notable artists to the Cahokia Mounds region. From their travels, they left us with their various renditions of some of the mounds. One of these artists who visited and drew the mounds at Cahokia was Karl Bodmer (Figure 8).

Figure 8. Engraved portrait (1894) of Karl Bodmer by Loys Delteil, depicting Bodmer as he appeared in mid-life. Source: *Karl Bodmer's America* 1984:363.

In 1831 Alexander Maximilian, Prince of Wied, was planning an expedition from Europe to North America to study the American West and the Indians who resided there. During the course of planning, Prince Maximilian found Swiss artist, Karl Bodmer, and asked him to accompany him on the expedition to America, a trip that would last for two years from 1832-1834. Bodmer agreed, and in May of 1832, the expedition crew set sail for America. Bodmer's assignment for the voyage was to draw and paint the various landscapes, fauna, and people he encountered along the way. Meanwhile, Maximilian kept journal records of their daily activities as they traveled the Ohio and Missouri Rivers. Bodmer's artwork composed during the expedition captured some of the most primitive and realistic images of the American Indian and the still largely unsettled western frontier before the invention of the photograph. Bodmer did an excellent job depicting the essence and splendor of the times.

During a return trip to St. Louis, the expedition members led by Maximilian stopped at Cahokia. During their stay Bodmer composed two drawings. One drawing was of Monks Mound showing its eastern face (Figure 9), and the second drawing depicted a view looking south from Monks Mound (Figure 10). Bodmer's drawings provide the viewer of these drawings a clear visual image of how Monks Mound and some of its surrounding mounds appeared in the 1830s.

Another professional artist to visit Cahokia was John Casper Wild, more commonly known by his abbreviated name J.C. Wild. Wild was a lithographer living in St. Louis and visited Cahokia in 1841. One of his most recognizable works is a 200-page volume book titled *The Valley of the Mississippi*. Here Wild captures the times with descriptions and drawings of various landmarks and scenic views along the Mississippi River. Some of his drawings include the St. Louis Court House, St. Louis University, a view of St. Charles, Missouri, a few general panoramas of St. Louis, the Piasa Bird painting in Alton, Illinois, and the mounds at Cahokia. Wild's drawing of Cahokia depicts two men (Wild and his companion) peering out into the plain from the top of Persimmon Mound (Mound 51) (Figure 11). They appear to be looking in a southwest direction with Monks Mound in the foreground to their right. The two larger mounds illustrated in the

Figure 9. Sketch of Monks Mound drawn by Karl Bodmer during his visit to Cahokia around 1834. Original sketch drawn with pencil and ink on paper and measures 10 x 12 ½ inches. Source: *Karl Bodmer's America* 1984:131 (Plate 131).

Figure 10. Sketch of mounds located to the south of Monks Mound by Karl Bodmer during his visit to Cahokia around 1834. Original sketch drawn with pencil and ink on paper and measures 10 x 16 inches. Source: *Karl Bodmer's America* 1984:130 (Plate 130).

Figure 11. Sketch of Cahokia Mounds drawn and lithographed by J.C. Wild during his visit to Cahokia in 1841. Wild and his companion are on top of Mound 51, Persimmon Mound, looking southwest. Monks Mound is located on the right with many trees. The buildings on Monks Mound probably belonged to resident at the time T. Amos Hill. Source: Wild 1948[1848]:52.

drawing to the left are today known as the Jesse Ramey Mound (Mound 56), and behind it to the farthest left, is the Fox Mound (Mound 60). Wild's description of the Jesse Ramey Mound reads, "One of them rises very steeply in a conical form and has a large tree growing near the top of it. At a distance it looks not unlike a large helmet-cap of a dragoon with a feather in its side" (Wild1948 [1841]:50). At the summit of Monks Mound, Wild's drawing depicts a growth of trees, a house, and several outbuildings belonging to the owner T. Amos Hill.

During Wild's stay, he must have climbed to the top of Monks Mound at some point, because he describes the view from the top as "of exceeding beauty" (1948 [1841]: 54). At the base of the small mound where the drawing was taken from, in a period of minutes Wild and his companion found on the surface of the ground, "about half a peck of broken bones and pieces of pottery and flint. One of those bones, which is nearly perfect, is evidently the arm bone of a human being" (Wild1948 [1841]:53). Wild's finds demonstrated that despite Cahokia being abandoned for hundreds of years, the land still showed signs of heavy occupation from its previous prehistoric inhabitants.

One traveler of the time who sketched Monks Mound (Figure 12) and wrote of his experiences at Cahokia in his work titled, *Excursion through the Slave States*, was G.W. Featherstonhaugh. Like most others before him, Featherstonhaugh, pronounced "Fanshaw" (Fowler 1969:8), was busy exploring the unsettled land of the continent. He and his cohorts around 1834-1835 had made their way to Cahokia to document their finds. During Featherstonhaugh's stay, he was tempted to open one of the small mounds with hopes of finding an ancient chief, but he and his companions were not prepared to: "night was coming on, we had at least six miles to walk, and ran some risk of not reaching the Mississippi before the last trip of the steam ferry-boat" (Featherstonhaugh 1844:268-269).

What is magnificent about these early travelers, some bringing their own drawings of the mounds to the table, and others sharing their unique perspectives of the area in their writings, is that their works enable us as a reader from the 21st century to come to a better understanding of

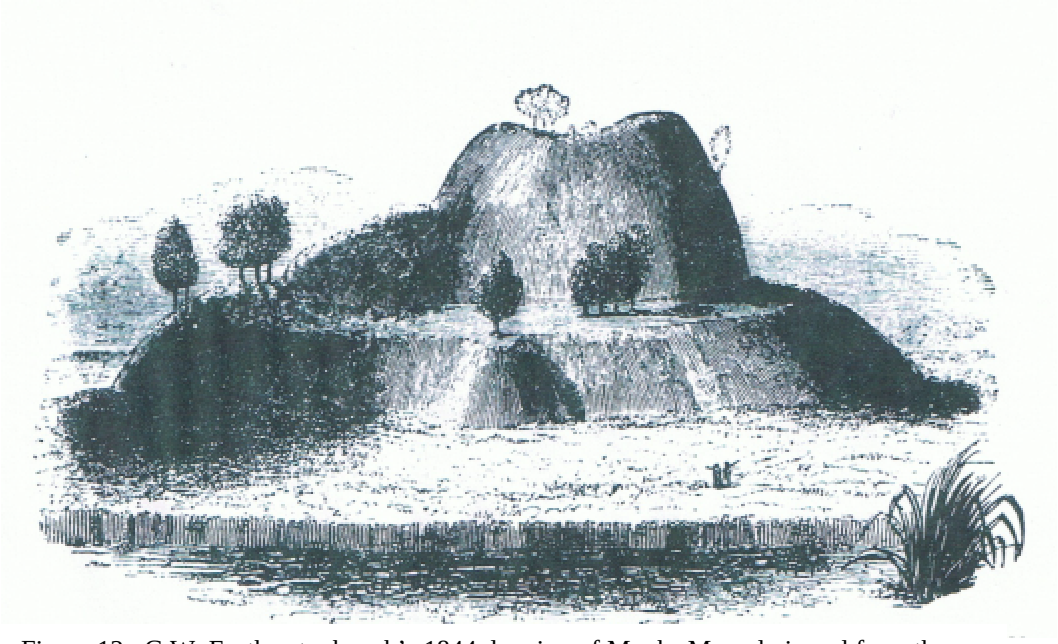

Figure 12. G.W. Featherstonhaugh's 1844 drawing of Monks Mound viewed from the south looking north. Source: Featherstonhaugh 1844:267.

the overall feeling of the times and the events taking place at Cahokia in the first half of the nineteenth century. Because we were not there, we can only use our imagination based upon these earlier scholars' stories and drawings. Upon the discovery of the New World centuries ago, countless curious individuals set foot in this new place, equipped to map, explore, and document this vast and largely unspoiled land. Some of these explorers I have already mentioned were commissioned to travel, while others traveled throughout North America under their own free will. Either way, they went about their way to document and tell of their many finds. A number of those fortunate men had the opportunity to visit Cahokia and tell us their story. Warren King Moorehead, the leading Cahokia investigator in the 1920s believed it was these men who "saw Cahokia at its best" (Moorehead 1922:7). To these forerunners who wrote of Cahokia's earliest history, we are ever grateful.

Chapter 2

Cahokia in the Works

One of the first archaeologists to visit the Cahokia area between 1848 and 1860 was Dr. Charles Rau. Rau was born in Belgium in 1826, and as a young adult attended school in Germany at the University of Heidelberg. While studying at Heidelberg he decided to leave his education for work in the iron industry. It is believed that Rau's studies at Heidelberg had at some point impacted his interests in European archaeology and later American archaeology (Kelly 2002:118). In 1848, at age twenty-two, Rau left Germany for America. Crossing the Atlantic, he landed in New Orleans and found his way into the St. Louis area, where he lived and worked for over a decade as a teacher. Beginning as early as 1850, Rau taught a variety of subjects, including language, history, geography, and natural sciences, at a school in Belleville, Illinois. In 1855 he lectured on topics in mineralogy, geology, and general botany at the newly established St. Louis College of Medicine and Natural Science (Kelly 2002:121-122). In addition to Rau's teaching career, he was a collector of Indian relics, and often wrote on topics in archaeology and anthropology. By 1863, he had written twenty-two articles on topics pertaining to North American antiquities.

In 1860, Rau visited the Cahokia area, more specifically the left bank of the Cahokia Creek, at the northern extremity of Illinoistown, opposite St. Louis (Rau 2006 [1867]:347). At the time of

his visit, Rau walked the bank of the Cahokia Creek, examining the pottery he found exposed on the ground along the way. In Rau's article written for the Smithsonian entitled "Indian Pottery", he described in detail the types of pottery sherds he witnessed, including their variations in size, thickness, coloring, shape, tempering, and design. On his walk, he found some areas near the bank that had been dug out some time ago. Based upon careful examination, Rau was convinced that the dug out spots he discovered were the places where the aborigines had once gathered clay for the manufacturing of their pottery (Rau 2006 [1867]:347).

Charles Rau's writings in "Indian Pottery" confirm his presence at Cahokia in the 1860s, but this is the only known documentation of his presence at the site. He may have very well spent more time excavating here, but if so, he never gave mention of it.

In one of Rau's articles entitled "A Deposit of Agricultural Flint Implements in Southern Illinois", he reported a discovery, made known to him by Cahokia notable Dr. John J.R. Patrick, of a large deposit of unused flint implements found in East St. Louis when laborers were grading an extension on Sixth Street (Rau 2006 [1869]:402). During the grading, he explains that there were about 50 flint hoes and approximately 20 flint shovels found in-situ in perfect unused condition along with many small marine shells and several large pieces of flint and greenstone. Familiar with North American flint implements, Rau was the individual who classified the prehistoric digging tools as "shovels" and "hoes".

In the early 1860s, for unknown reasons, Rau left St. Louis and found work as a teacher in New York City. Although he was a skilled instructor, his hope was to one day find a job working in the field of archaeology. In 1875, Rau had some good fortune and was hired by the Smithsonian Institution in Washington, D.C. for the purpose of organizing archaeological related artifacts for the 1876 Centennial Exposition in Philadelphia. At the exposition Rau displayed artifacts from the collections of his friend John J.R. Patrick (Kelly 2002:125). Afterwards, Rau continued to work for the Smithsonian, and later in life held the title of curator for the Department

of Archaeology at the Institution. He held this title until his death in 1887. Five years prior to his passing Rau received a Ph.D. degree from the University of Freiburg in Germany[1].

Dr. John J.R. Patrick, with whom Rau was well acquainted, was a large contributor toward the preservation at Cahokia Mounds during the late 1800s. In Rau's 1868 article, when discussing the discovery of the cache of flint implements in East St. Louis, it becomes strikingly apparent of Patrick's deep interest and concern for all that entails archaeology. Rau's report reads, "As soon as Dr. Patrick heard of the discovery, he hastened to East St. Louis, for the purpose of ascertaining on the spot all details concerning the occurrence of those flint tools; and in order to obtain still more minute information, he afterwards repeatedly revisited the place of discovery which is about 14 miles distant from Belleville, and can be reached after a short ride, the latter place being connected by railroad with East St. Louis" (Rau 2006 [1869]:402).

Dr. John J.R. Patrick, a dentist from Belleville, Illinois, was one of the first to acknowledge the need for an accurate map of the mounds at Cahokia. In 1876, with his own money, he hired Surveyor F.G. Hilgard of St. Clair County with the help of B.J. Vancourt of O'Fallon, Illinois and William J. Seever of St. Louis, to create an accurate map of the mounds at Cahokia (Figure 13). Prior to 1876 no person had ever attempted to thoroughly map the mounds. Instead, the mounds on early maps of the region were labeled vaguely such as "Indian Ancient Tombs" to mark their locations. The Patrick map of Cahokia included the precise locations and shapes of the mounds. Most of the mounds were shaded in with colors ranging from light gray to black to emphasize their heights. Patrick afterwards assigned numbers to 71 of the mounds, placing one number beside each mound on his map (Figure 14). Today Patrick's mound numbers are still in use by archaeologists when referring to the mounds. Archaeologist Warren K. Moorehead, who is considered a legend in regards to Cahokia's preservation and research in the early 1920s, believed

[1] For a detailed description of Rau's life and career read John E. Kelly's selection in *New Perspectives on the Origins of Americanist Archaeology* entitled "Developments in the Career of a Nineteenth-Century German-American Archaeologist".

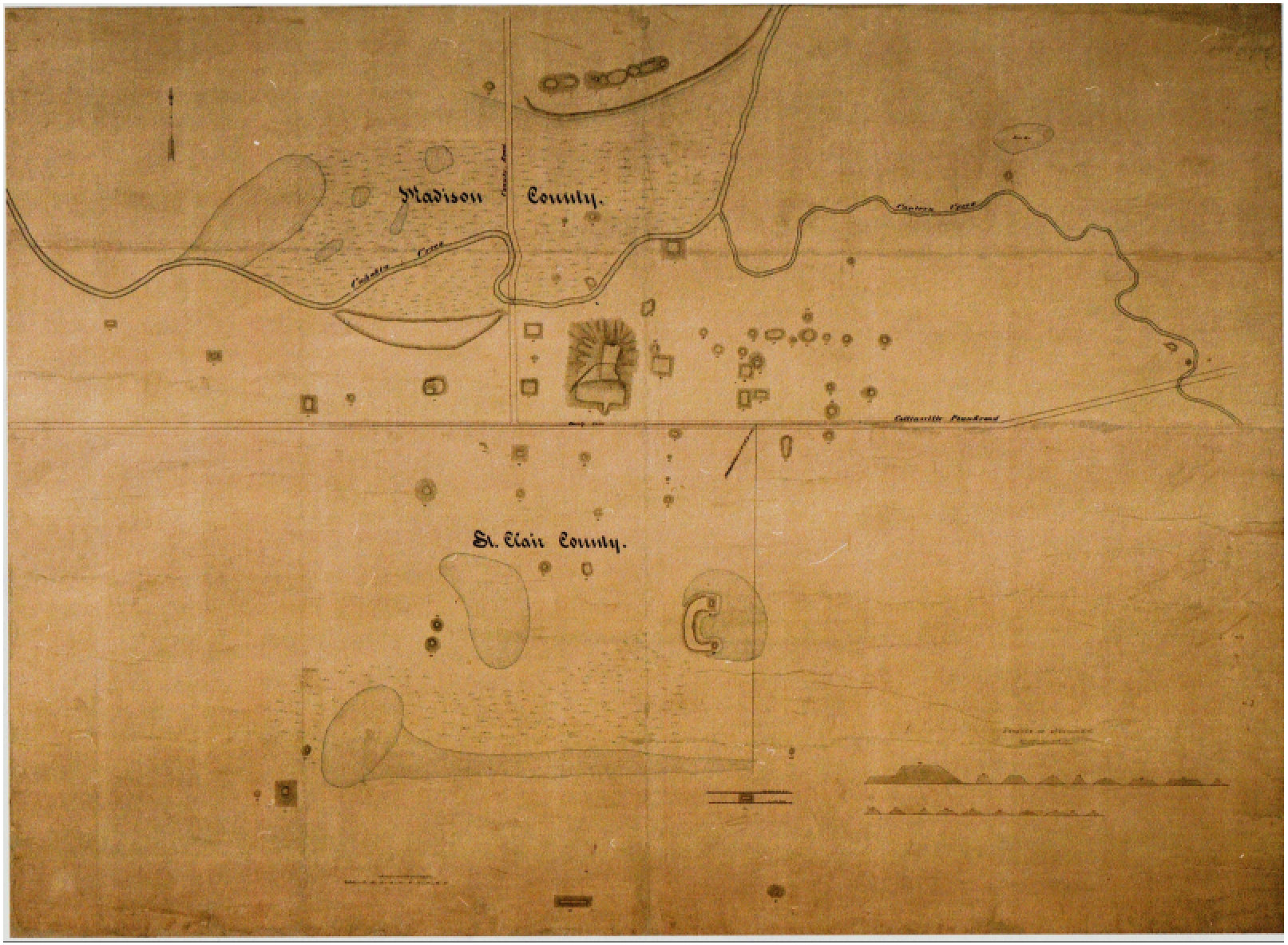

Figure 13. Map of the Cahokia Mounds Group showing 71 mounds. Map by John J .R. Patrick, 1876. [Patrick Map # 1]. Missouri Historical Society Library. Photograph by David Schultz, 1999. NS24226. Scan 2007, Missouri Historical Society.

Figure 14. Photograph of the Cahokia Mounds Group Patrick Map at the Missouri Historical Society. Photograph shows a closer view of Monks Mound and surrounding mounds of the main group. Mound numbers were placed beside the mounds on the map. Map by John J.R. Patrick, 1876. [Patrick Map #1]. Photograph taken in fall, 2008. Courtesy of the Missouri Historical Society.

the Patrick map of Cahokia to be, "The best and most complete map of the Cahokia group I have observed" (Moorehead 1922:13). He too spoke highly of Patrick by calling him, "one of the pioneers in Cahokia work" (Moorehead 1929:96).

Patrick not only had the mounds at Cahokia mapped, but proceeded to have surveyors map the remaining mounds in East St. Louis (Figure 15 and 16), the Fairmont City or Powell group of mounds (Figure 17 and 18), and the "Snyder Groupe," southwest of Cahokia, today known as the Pulcher site. On the map containing the mounds in East St. Louis, surveyors indicated the place where Big Mound once stood in St. Louis before its destruction in 1869. In addition to these maps, a more detailed map of Monks Mound was created the same year (Figure 19), making for a total of five maps,[2] all completed prior to 1880. Of the five Patrick maps, we know that Patrick intended for at least three of them to connect with one another for the purpose of viewing them as one map. These include the main Cahokia map showing 71 mounds, the map showing the western portion of the Cahokia site illustrating the Powell group of mounds, and the East St. Louis map. We know Patrick intended for these three maps to connect because he keyed them for connection. For example, where Collinsville Road ends on the Powell map and where it continues on the main Cahokia map, Patrick placed a letter "A" on both maps. When aligning both "A"s with one another, the two maps unite as one. The same is true for the East St. Louis Patrick map. As for the individual detailed map of Monks Mound, Patrick intended it to be viewed as a separate unit.

When taking a closer look at Patrick's Pulcher map, it becomes a little more problematic in determining whether or not he intended it to connect with the other three.

When the Patrick maps were donated to the Missouri Historical Society, they were in very poor condition and had been stored rolled up in long mailing-type tubes. In the late 1990s, the

[2] Map 1, measures 51.25" x 74.75" and illustrates the Cahokia Mounds Historic Site. Map 2, measures 70.5" x 22.5" and includes a series of mounds along the south bank of Indian Lake between the Cahokia Mound Group and the East St. Louis Mound (Fairmont City). Map 3, measures 23.75" x 42.25" and includes the East St. Louis Mound Group and Big Mound. Map 4 measures 15.5" x 10.5" and is a detailed map of Monks Mound. Lastly Map 5, measures 18" x 40" and includes what was once known as the Snyder's Mound Group, but today called the Pulcher Mound Group. (This information on the measurements of the Patrick maps was retrieved from a letter addressed to the Missouri Historical Society).

Figure 15. Map showing the East St. Louis Mound Group and Big Mound in St. Louis, Missouri [Patrick Map #3]. Map by John J.R. Patrick, 1876. Missouri Historical Society Library. Photograph by David Schultz, 1999. NS24023. Scan 2007, Missouri Historical Society.

Figure 16. Photograph of the East St. Louis Mound Group and Big Mound in St. Louis, Patrick Map at the Missouri Historical Society [Patrick Map #3]. Map by John J.R. Patrick, 1876. Photograph taken in the fall, 2008. Courtesy of the Missouri Historical Society.

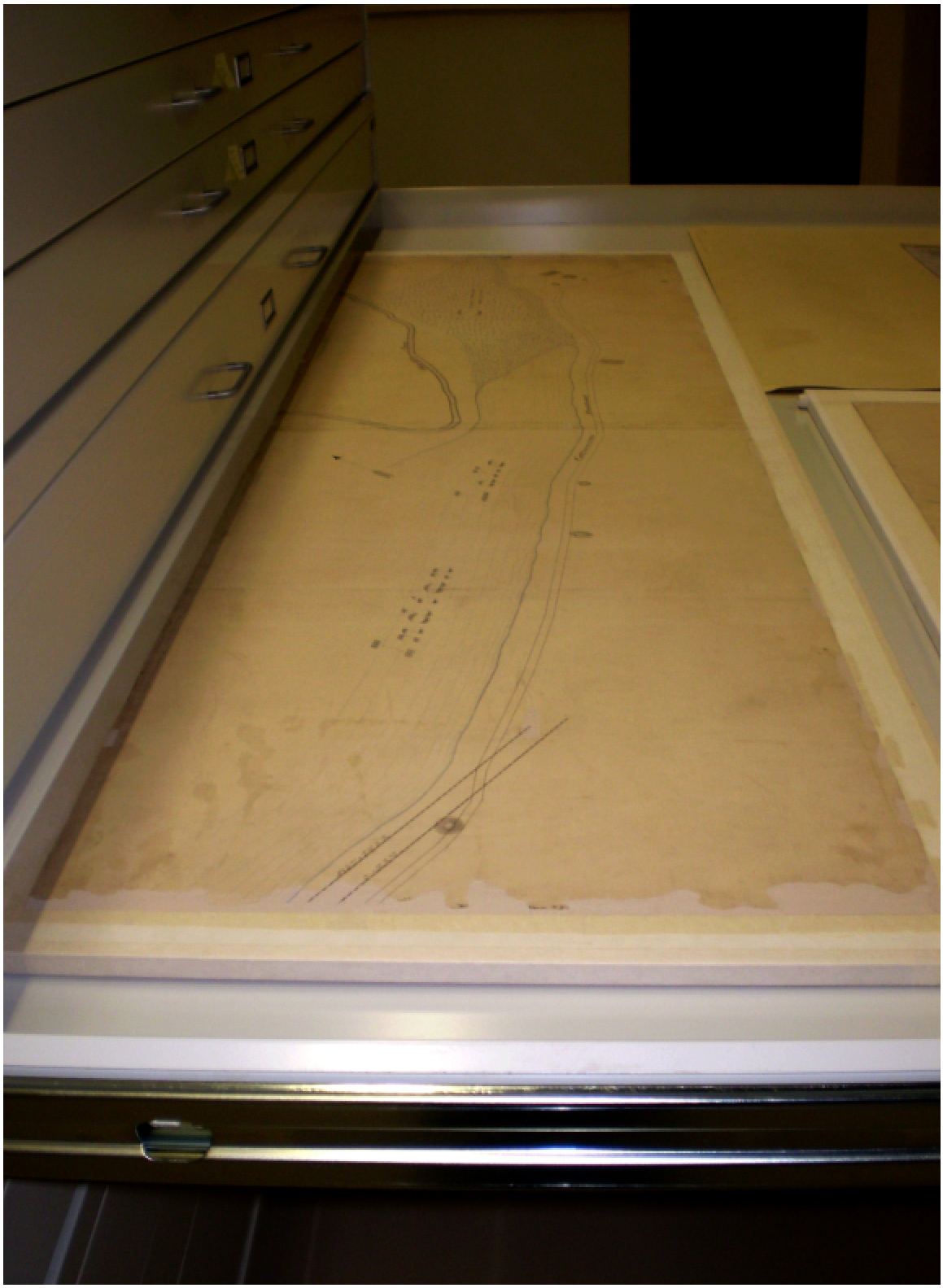

Figure 17. Photograph of the Powell Mound Patrick Map at the Missouri Historical Society. Map includes a series of mounds along the south bank of Indian Lake between the Cahokia Mound Group and the East St. Louis Mound Group [Patrick Map #2]. Map by John J.R. Patrick, 1876. Photograph taken in the fall, 2008. Courtesy of the Missouri Historical Society.

Figure 18. Photograph of the Powell Mound Patrick Map at the Missouri Historical Society. Photograph shows the eastern portion of the map. The Powell Mound group of mounds is located on the west end of the Cahokia site. The rectangular mound on this map is the Powell Mound, Mound 86, which was for the most part destroyed in 1931 [Patrick Map #2]. Map by John J.R. Patrick, 1876. Photograph taken in the fall, 2008. Courtesy of the Missouri Historical Society.

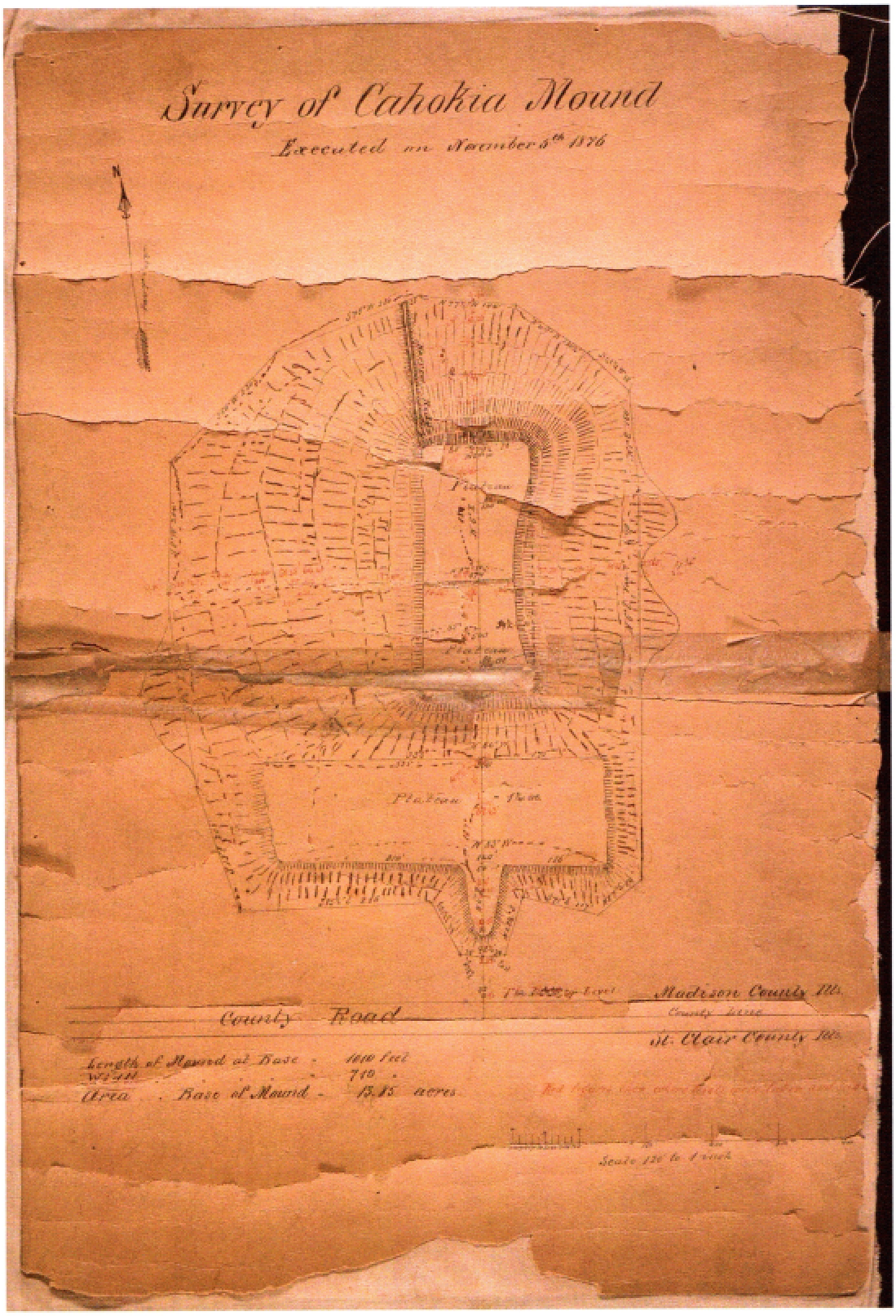

Figure 19. Survey of Cahokia Mound. Executed on November 5[tn] 1876 showing detail of Monks Mound [Patrick Map #4] [Preconservation photograph, March 1997]. Missouri Historical Society Library. Photograph by David Schultz, 1997. NS21083. Missouri Historical Society.

Historical Society, together with the Cahokia Mounds Museum Society, and The Greater St. Louis Archaeological Society spent thousands of dollars towards their conservation (Emily Jaycox of the Missouri Historical Society, personal communication 2008) and four of the maps were flattened, repaired, and stabilized. Of the five Patrick maps, the "Snyder Groupe", also known as the Pulcher map, is yet to be conserved. Because the Pulcher map is in such poor condition, it makes it difficult to determine its connection with the other maps. And because the Pulcher Site is located several miles southwest of the Cahokia Mound Group and the East St. Louis Mound Group, it is unlikely that the Pulcher Map connects with the other Patrick maps. In addition to his maps, Dr. Patrick also donated many artifacts found in and around the Cahokia area, and today these are stored with the Society's Museum Collections.

In 1880, Patrick and Frederic Ward Putnam, curator of the Peabody Museum of Archaeology and Ethnology at Harvard University, published a report in the *12th Annual Report of the Peabody Museum,* which included some discussion of Monks Mound, along with two illustrations of two models made by Patrick. One of the models shows the appearance of Monks Mound as it appeared in 1879, one year prior to the report's publication (Figure 20), and the other shows both Putnam's and Patrick's beliefs on how the mound appeared in prehistoric times (Figure 21). In 1891, the original Patrick maps, including two cast iron replicas of Patrick's Monks Mound models, were placed in the care of the Missouri Historical Society's collections where they reside today.

By the late 1800s, there were only a few small excavations ever undertaken on Monks Mound. The first excavation on record was conducted by T. Amos Hill, when digging a well on the west side of the mound, and again, when laying the foundation for his house and outbuildings on the summit. In both cases, artifacts and cultural debris from human occupation were discovered in the process. Furthermore, Hill apparently removed a small mound on the southeast corner of Monks Mound's third terrace (Fowler 1997:17), for the purpose of building his cellar, icehouse, and cistern in its place (Skele 1988:31).

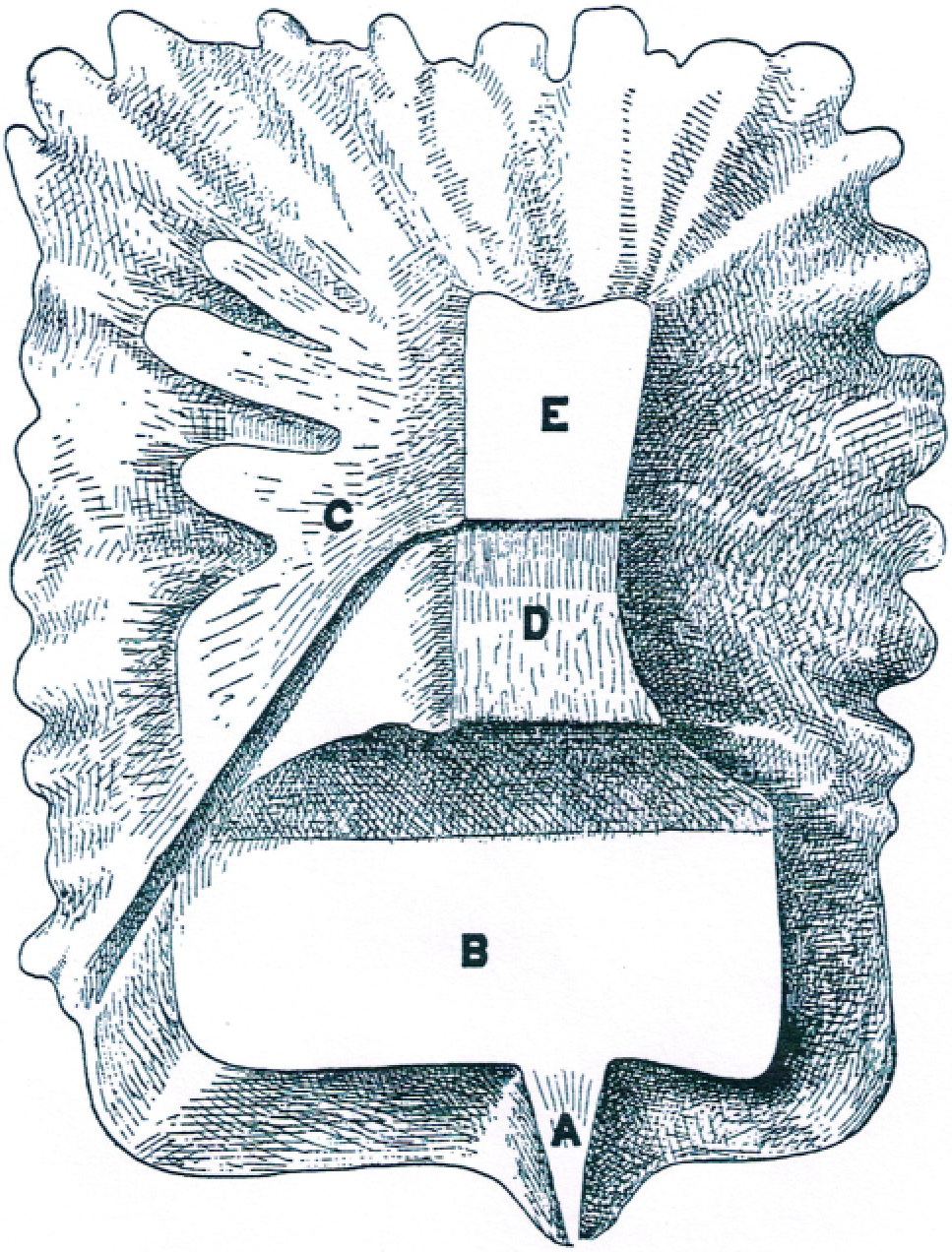

Figure 20. Drawing of a model of Monks Mound made by Dr. Patrick as the mound appeared in 1878 with uneven and gullied sides showing age. The dark line going up the mound's western face indicates a road cut out by the previous owner T. Amos Hill who once lived on the mound's summit. Source: Putnam and Patrick 1880:472.

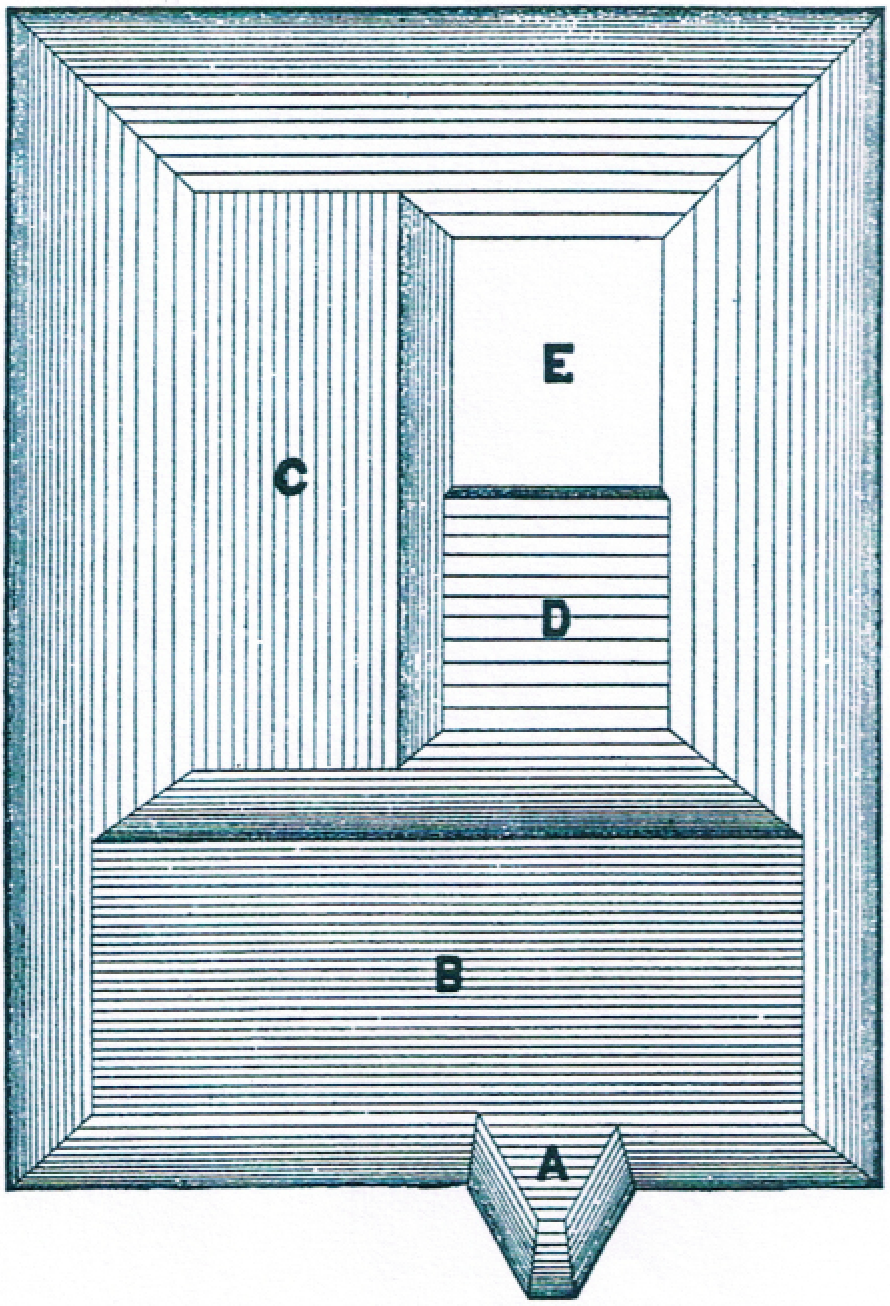

Figure 21. Drawing of a model of Monks Mound made by Dr. Patrick showing how the mound probably appeared during prehistoric times prior to surface alterations such as plowing and natural causes such as heavy rains. A. and B. are the lowest platforms or terraces; C. the second terrace; D. the third terrace; E. the fourth and highest terrace. Source: Putnam and Patrick 1880:474.

The second account of excavation came from another owner, Thomas J. Ramey, who purchased a large tract of Cahokia land, which included Monks Mound in 1864. Following its purchase, the Ramey family built a brick house at the base of Monks Mound's northwest corner. They too built a fence, which upon completion surrounded both the house and Monks Mound (Skele 1988:31). When hearing of a long standing rumor that a pine tree situated on the northern face of Monks Mound marked the entry way to a vault or room with treasure, Mr. Ramey was determined to locate it. He began by digging next to the tree and proceeded to dig a tunnel approximately 90 feet towards the center, only to find a single piece of lead-ore. Disappointingly for Mr. Ramey, he found nothing else.

One "excavation" in the late 1800s at Cahokia that resulted in better luck was recorded by Reverend Stephen Peet. Following his graduation from Beloit College in Wisconsin in 1851, and during his enrollment at Yale Divinity School studying to become a Presbyterian minister, Peet found a love for old world archaeology, and later North American archaeology, through his college readings. After his graduation from Divinity School, he traveled to various western states as a church missionary, and later became a pastor establishing churches in Ohio, Wisconsin, and Illinois. Many of the churches he founded were in close proximity to some prehistoric Indian Mounds, including those at Cahokia. I can only imagine that his close presence to the mounds furthered his interests and research of the mounds. In 1878, Peet founded the *American Antiquarian*, one of the first archaeological journals of the time, and for 32 years he served as its manager and editor. Peet also published a number of articles for the journal, one of which appeared in a January 1891 issue entitled "The Great Cahokia Mound". In it, Peet mentioned that prior to his arrival to Cahokia, he had learned that workmen digging drainage ditches in the area had found a number of pottery pieces and human skeletons, but rather than carefully digging them up, the men had recklessly broken them. Peet described some of the artifacts discovered by the workers:

> One specimen was especially interesting. It represented a squirrel holding

> in its paws a stick, the teeth placed around the stick as if gnawing it, the whole making a handle to the vessel. We noticed also a frog-shaped pipe made from sand-stone, and many other animal-shaped and bird-shaped figures. The object which impressed us most was a sand-stone tablet, which contained figures very much like those found upon the inscribed tablets taken from one of the mounds of the Etowah group in Georgia (Peet 1891:9-10).

In the same issue of the *Antiquarian* Peet included a sketch of the sandstone tablet to provide readers with a better idea of its appearance. A photograph of the tablet is shown herein (Figure 22).

Figure 22. The engraved sandstone tablet described by Reverend Stephen Peet in 1891. The photograph above shows the front half of the tablet and the reverse side. Source: Fowler 1997:20.

Fortunately, for the sake of Cahokia, the Ramey family heavily supported the idea of protecting the mounds on their property. In one instance, an Eastern College sent a train full of students, workmen, and professors to Cahokia with picks and shovels for the purpose of investigating Monks Mound. As the group neared the mound, they were met by the owner, Thomas Ramey who curiously asked, "Where are you going?" When one professor told him they were planning to dig into the largest mound, Ramey told them with a firm voice that they were not allowed (*St. Louis Globe-Democrat* 1917). The group, to their dissatisfaction, left with nothing more than the digging tools they came with.

After Ramey passed away, his children upheld the same protective attitude as their father by prohibiting digging to take place on their land. However, the visibility of artifacts present on the ground and the growing knowledge of what lied beneath the mounds, did tempt some curious locals into trespassing onto Ramey's property. One man, Oscar Schneider, who moved to the

Collinsville area in 1914, admitted that he violated the rules, but only once *(*Brown 1977:2-3). Using a spading fork, Schneider dug on top of one of the round top mounds south of Monks Mound, where he found a human skeleton. Lying on top of the skeleton's chest was a copper serpent figure, which he kept, along with a black steatite earring (Brown 1977:2-3). Schneider is just one example of the numerous individuals who collected artifacts from Cahokia Mounds during this early period. There were those who secretly "excavated" on their own and then there were others who were surface collectors. One of the detrimental effects of doing such a thing, is the loss of provenience. Once an artifact is taken out of context, there is a sharp drop in the amount of knowledge we can gain from the discovery. During this time in history, there were no ordinances against digging into the mounds. In those days, and still true today, if a mound happened to be on a person's property, and they found it a disturbance, the owner could tear it down without consequence. Several mounds in the area including one of the larger mounds at Cahokia, the Powell Mound, met their end this way.

Although Ramey's turf was off limits to the majority of citizens, he did allow a couple of individuals to dig on the property, one of who was William W. McAdams. McAdams was a local Missouri resident and scholar, passionate on the topic of archaeology, especially the mounds at Cahokia. In the late 1800s he became involved with the site, conducting a few excavations and writing a number of articles about some of his finds and his knowledge of Cahokia. It was at the base of the northeast corner of Monks Mound where he made one of his grandest discoveries. The year was 1882, and there to accompany McAdams in the field was Dr. John J.R. Patrick, McAdams' son Clark, and a few other workmen. In a chapter of the book entitled *History of Madison County, Illinois,* McAdams wrote, "At the foot of the Cahokia temple we were so fortunate as to discover a sort of tomb or burial place and in size less than two rods square, amid the crumbling dust of near a score of human skeletons, we found about a hundred vessels of pottery in almost perfect condition" (McAdams 1882:62).

William McAdams wasn't the only individual in his family who was fascinated with archaeology. Growing up, William's son Clark often accompanied his father in the field, and together they spent years exploring and digging into the mounds along the Illinois River. In Clark's early life, he was constantly immersed in the subject and this is what drove his initial interest in archaeology. In one of Clark McAdams' articles titled *The Archaeology of Illinois,* he reminisced of life growing up in his father's house and the knowledge he inherited at a young age:

> In my father's house there were many manifestations of devotion to the subject. Indian axes held our doors ajar in the summer. Our mantle vases came from the mounds. Most of our family commandments pertained to the care of precious flints and fragile pots…I was quite familiar with the great Cahokia mound before I heard of the pyramids of Egypt…Discoidal, I think, was the first big word in the lexicon of my youth (McAdams 1908:35).

Clark further described the atmosphere he grew up in:

> Kindred spirits visited my father's house. They wore the first long black coats of which I have any recollection. They spent days investigating the things in our house, which was a veritable museum; and I have sometimes had the vain thought that they must have regarded my brother and me as very valorous youngsters, for the room in which we slept was frequently the repository for a row of grinning skulls, while on the wall behind was the terrible picture which some of you may recall of Neanderthal man restored (McAdams 1908:35).

Clark McAdams' early involvement with Cahokia was more than enough for him to realize the site's importance to Illinois history. In his writings, he often emphasized to his readers the desperate need for Cahokia's protection. In one instance Clark wrote, "If the great Cahokia mound belonged to the Illinois Historical Society and enjoyed its protection, what a comfort it would be to those of us that tremble for its future!" (McAdams 1908:37). Furthermore, in an address before the Illinois Historical Society, Clark insisted that Monks Mound and the rest of the mounds at Cahokia be preserved (Skele 1988:38).

In 1893, both father and son were responsible for preparing an archaeological exhibit to be revealed at the World's Columbian Exposition in Chicago, Illinois. For the exhibit, they showed artifacts they had collected from the mounds at Cahokia. Later in 1906, Clark collaborated with Dr.

Cyrus A. Peterson to create a map of Cahokia, which was privately distributed (Fowler1997:47). The map was reprinted in 1928, in Addison J Throop's, *The Moundbuilders of Illinois* (Figure 23).

Dr. John J.R. Patrick was another individual who dug to some extent in the Cahokia area. In the early 1920s, after Patrick had passed away, archaeologist Warren King Moorehead met with Patrick's widow, Mrs. John Bauman, who showed Moorehead some of Patrick's field notes from 1878 and 1879. Patrick's notes indicated he had dug into a number of places along Cahokia Creek and into some low mounds (Moorehead 1923:43). In his notes Patrick also wrote about finding several artifacts including effigy pottery, a skeleton, and a skull accompanied by a copper plate (Moorehead 1923:43-44). But regrettably, according to Moorehead, Patrick did not indicate the precise locations where he found his material, nor the mound numbers specifying where he dug.

One man from this time period who undeniably deserves credit as a leading force towards the preservation of Cahokia's mounds is John Francis Snyder (Figure 24). Dr. John Francis Snyder was born in March, 1830, in a farmhouse at the base of an Indian Mound south of Cahokia (Figure 25), an area today known as the Pulcher site. Snyder spent the later half of his life living in Virginia, Illinois and was trained both as a medical doctor and lawyer. He studied medicine because as a child he was persuaded to find a career that would help support his family, but he never had a passion for the occupation he held. In one instance, he confided in a letter to a friend that he found his profession "obnoxious" (Connolly 1962:16). Later in life, he was financially stable enough to pursue what he enjoyed: geology, history, and archaeology. Another interest of his was collecting everything that he found to be fascinating. Included in his collections were history books, stones, corals, shells, starfish, insects, skulls of animals and birds, fossils, crystals,

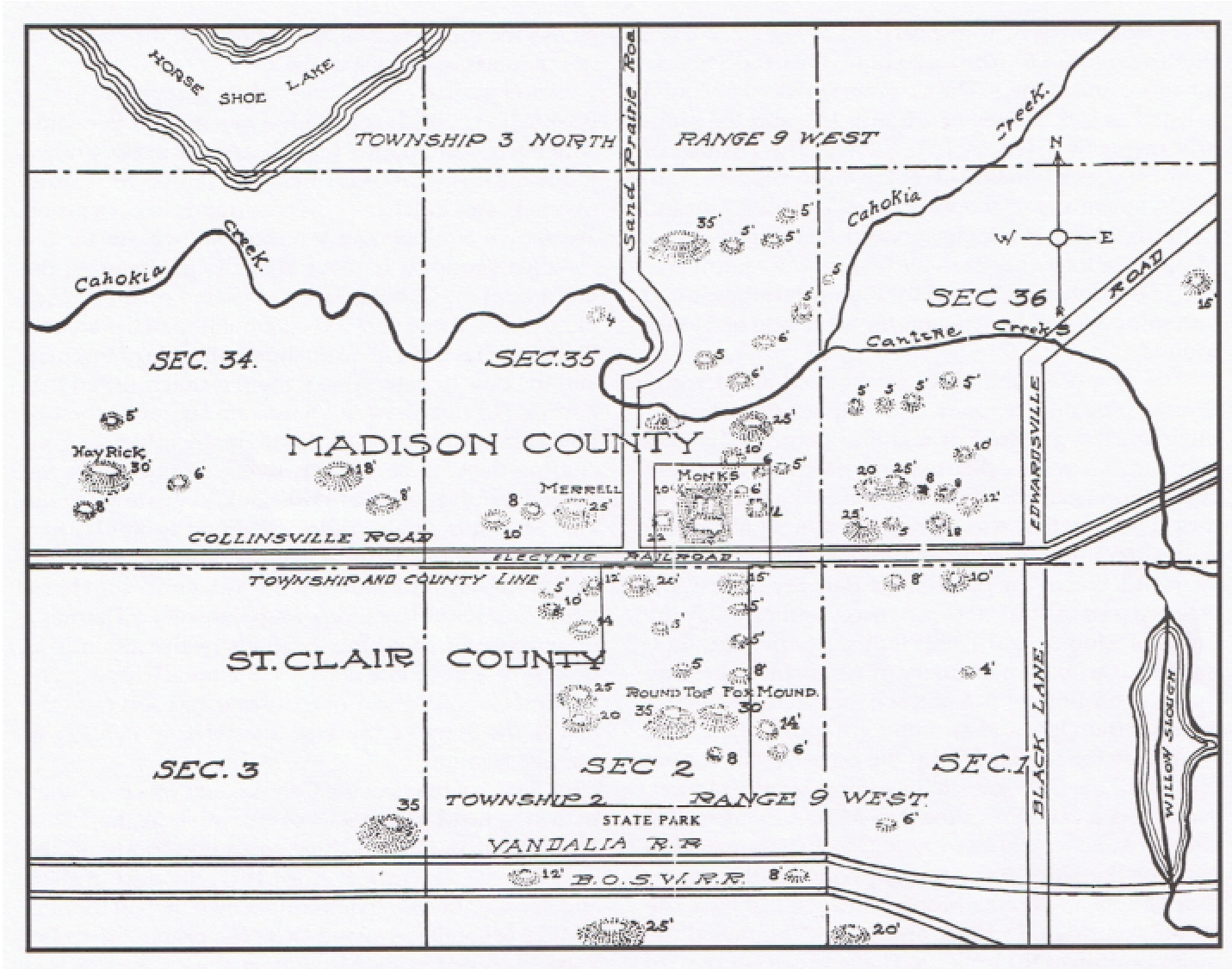

Figure 23. The Dr. Cyrus A. Peterson and Clark McAdams 1906 map of Cahokia Mounds. Mound heights are written beside each mound and are given in feet. Source: Fowler 1997:47.

Figure 24. Dr. John Francis Snyder. Source: Connolly 1962.

ores, old state bank notes, framed continental notes printed by Benjamin Franklin, and mounted heads of animals to name only a few. Some of his older artifacts were shown at the World's Columbian Exposition in Chicago and other items were exhibited in a building close to his home (Connolly 1962:17-18). The most numerous relics in his collections were thousands of Indian artifacts. As a young child, Snyder wandered about Indian mounds, which likely prompted his love for archaeology. Most of the Indian artifacts in his collections were found during excavations he conducted himself at mounds in Illinois. There is no evidence showing that Snyder ever excavated into any of the mounds at Cahokia, but he did explore and write site reports of his work at the Baehr site, the Hemplull site (sometimes referred to as the Hemphill site), and the Brown County Ossuary in Illinois (Fowler 1962:183). When Snyder found time, he read every available writing on the subject of archaeology and even published some of his own articles on the topic.

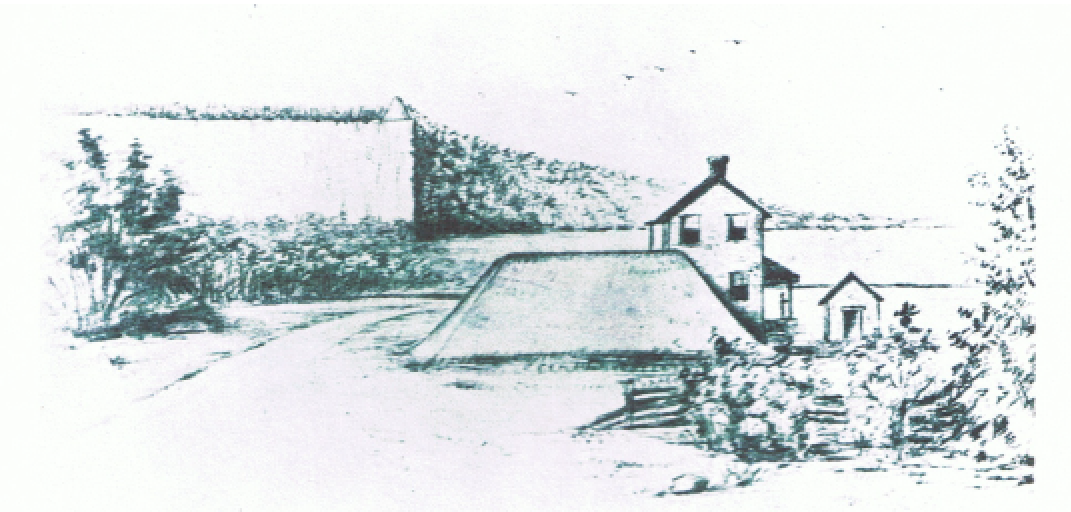

Figure 25. Square Mound located at a site today known as the Pulcher Site, southwest of Cahokia Mounds. The house was built by Adam W. Snyder at the base of an Indian Mound, and there Dr. John Francis Snyder was born and spent the first three years of his life. Source: Connolly 1962:313 (Plate 37).

One of the issues he wrote of was the desperate need for the study and preservation of ancient remains in Illinois. What Snyder recognized, and one of the first of his time to do so, was that archaeological sites were in constant danger from the daily advancements of modern man. As

time continued to pass, so did the passing of the mounds. Archaeological remnants such as those in St. Louis and East St. Louis had already fallen victim to the growing cities, and Snyder had personally witnessed some mounds in Illinois leveled off to make way for construction projects, particularly the construction of the railroads. Watching these irreplaceable time capsules being decapitated one by one, and on top of that coming to the realization that only a small number of people seemed to have any empathy towards the mounds, left a sickness in his stomach. Snyder knew something had to be done to gain the awareness of the people and to protect the mounds that still remained. Snyder was particularly concerned about the mounds at Cahokia, especially Monks Mound. At the first meeting of the Illinois State Historical Society in January 6, 1900, Snyder frantically pleaded for both state aid to investigate the mounds and for the preservation of Illinois antiquity. What frustrated Snyder was that while the prehistoric sites in Illinois were largely ignored, Illinois Institutions supported archaeological research on foreign lands (Connolly 1962:19). Despite Snyder's efforts, his work had failed to persuade the Illinois State officials to purchase land at Cahokia. Then, in 1911 Snyder formed an organization named the "Monks of Cahokia", whose main objective was to support the effort to turn Monks Mound and surrounding land into a protected state park. Later, in the early 1920s, Snyder requested for archaeologist Warren King Moorehead to visit Cahokia to help prove to the state legislators that Cahokia was worth saving (Young and Fowler 2000:33).

David I. Bushnell, Jr., a St. Louis native and assistant in archaeology at the Peabody Museum of American Archaeology and Ethnology at Harvard University, studied the mounds of the American Bottom region in the early 1900s, and in 1904 he published a 20 page report titled *The Cahokia and Surrounding Mound Groups,* dedicated to describing some of the mound groups he observed. The mound groups he described included the Cahokia Mound Group, the East St. Louis Mound Group, the St. Louis Mound Group, a group of mounds north of Cahokia near Long Lake (today called the Mitchell Site), the mounds in Forest Park in St. Louis, and two mounds situated on the bluffs northeast of Cahokia. A map of the northern portion of the American

Bottom is included in Bushnell's introductory pages for the purpose of showing the relative locations of the mound groups and their distances from one another. The mounds represented on his map appear as small black dots.

Two groups of mounds Bushnell mentions in his report, and regrettably not much is known about them, are the mounds that once existed in Forest Park in St. Louis, near the River Des Peres at the center of the western half of the park. One grouping consisted of nine mounds close to the bank of the river and the second group included seven mounds approximately 1,000 feet south of the first group (Figure 26).

In 1901 the city of St. Louis planned to demolish the mounds located within the park, in preparation for the 1904 World's Fair (Bushnell 1904:13). And apparently, the mounds were not the only disturbance to the park's landscape. Around the same time the mounds were intended for removal, the River Des Peres, running through the park, and heavily polluted by this time, was not fit for display to the soon to be fairgoers. Reportedly, by 1904, the city began enclosing the portion of the river in a large wooden box, keeping the sight and smell of the river hidden from the visitors (Allen 2003).

In the fall of 1901 Bushnell was granted permission to explore the Forest Park mounds prior to their destruction. Of the 16 mounds, he reported excavating into five of them; Mounds A, B, C, E, and F (Figure 26). The extent of his finds included fragmentary remains of three human skeletons, fragments of pottery and chert, and charcoal on the original surfaces of two of the mounds. Outside of the park, to the south, were several isolated mounds that, "were likewise explored but no objects were discovered" (Bushnell 1904:15). Although Bushnell confirms his excavations into these five mounds, as well as several mounds outside of the park, his descriptions provided of his explorations are very brief.

In 1922, a second report by Bushnell was published by the Smithsonian Institution entitled *Archeological Reconnaissance of the Cahokia and Related Mound Groups*. This report is similar

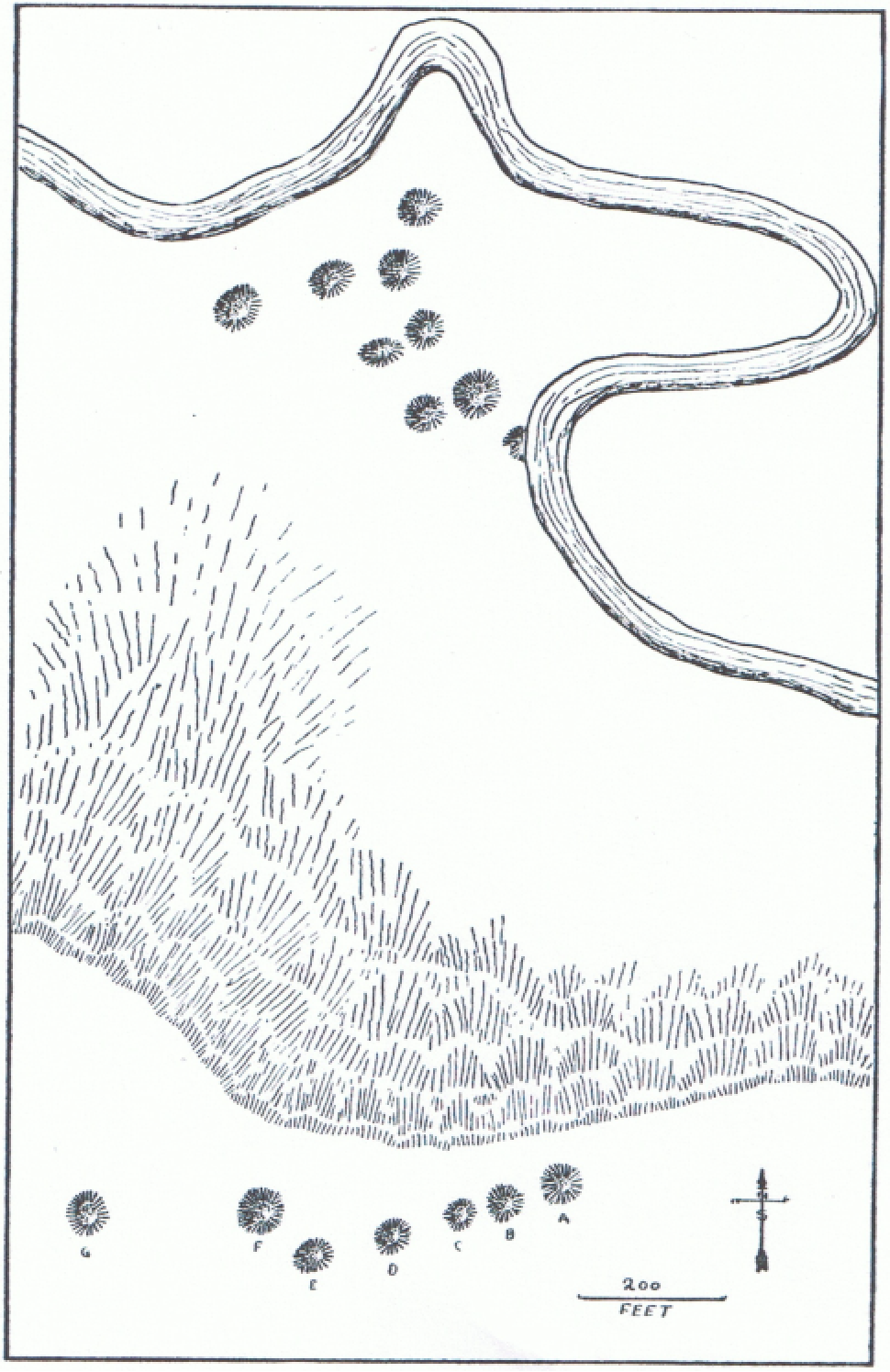

Figure 26. Mounds once existing in Forest Park in St. Louis, Missouri. David Bushnell Jr. conducted limited excavations here in 1901 and included this map in his article titled "The Cahokia and Surrounding Mound Groups". Source: Bushnell 1904:14.

to the first report published in 1904, but has a few noticeable differences. For one, in the 1922 report, Bushnell provides some discussion on his visit to a mound group south of Cahokia now known as the Pulcher site. He visited this mound group in the fall of 1921, and afterwards updated his map of the American Bottom, this time including Pulcher, what he calls the South Group (Figure 27). What is extraordinary about his 1922 report is that it contains four of the first aerial photographs ever taken of Cahokia's mounds and moreover the first aerial photographs taken of any of the earthworks in North America (Bushnell 1922:100) (Figure 28).

In February, 1922, (Fowler 1997:21) under the instruction of Major Frank M. Kennedy, two pilots from Scott Field in Belleville, Illinois, Lieutenant Harold R. Wells and Lieutenant Ashley C. McKinley, flew over Cahokia and took the first aerial photographs of the site. It just so happened though, the weather conditions along with the air pollution coming from the factories on the ground below resulted in photographs of poor quality. Despite the poor quality of the photos, Bushnell decided to go ahead and include four of the photos in his 1922 report for the purpose of keeping a record of the first aerial photographs taken at Cahokia.

A second flight attempt for aerial photographs of Cahokia was made a couple of months later in April, 1922. For many years, Dr. A.R. Crook, geologist and head of the Illinois State Museum was interested in obtaining aerial photographs of Cahokia because he believed they would help interpret the mounds' origins (Kelly 2000:30). At this period in the 1900s, there was some doubt that the earthworks of Eastern North America, including the mounds at Cahokia, were man-made. Instead some individuals, like Crook, were under the impression that the mounds at Cahokia were natural forming geological features. Crook began looking for air pilots by contacting individuals from the War Department, but nothing came of it. Finally, in 1922 Crook found two men from the Army Air Service who were capable of making a flight over Cahokia. The two men who were responsible for the flight and photographs were Lieutenant George W. Goddard and his assistant, Lieutenant H.K. Ramey. The difference between the first attempt and the second is that the second attempt produced photographs of exceptional quality (Figure 29). The photographs

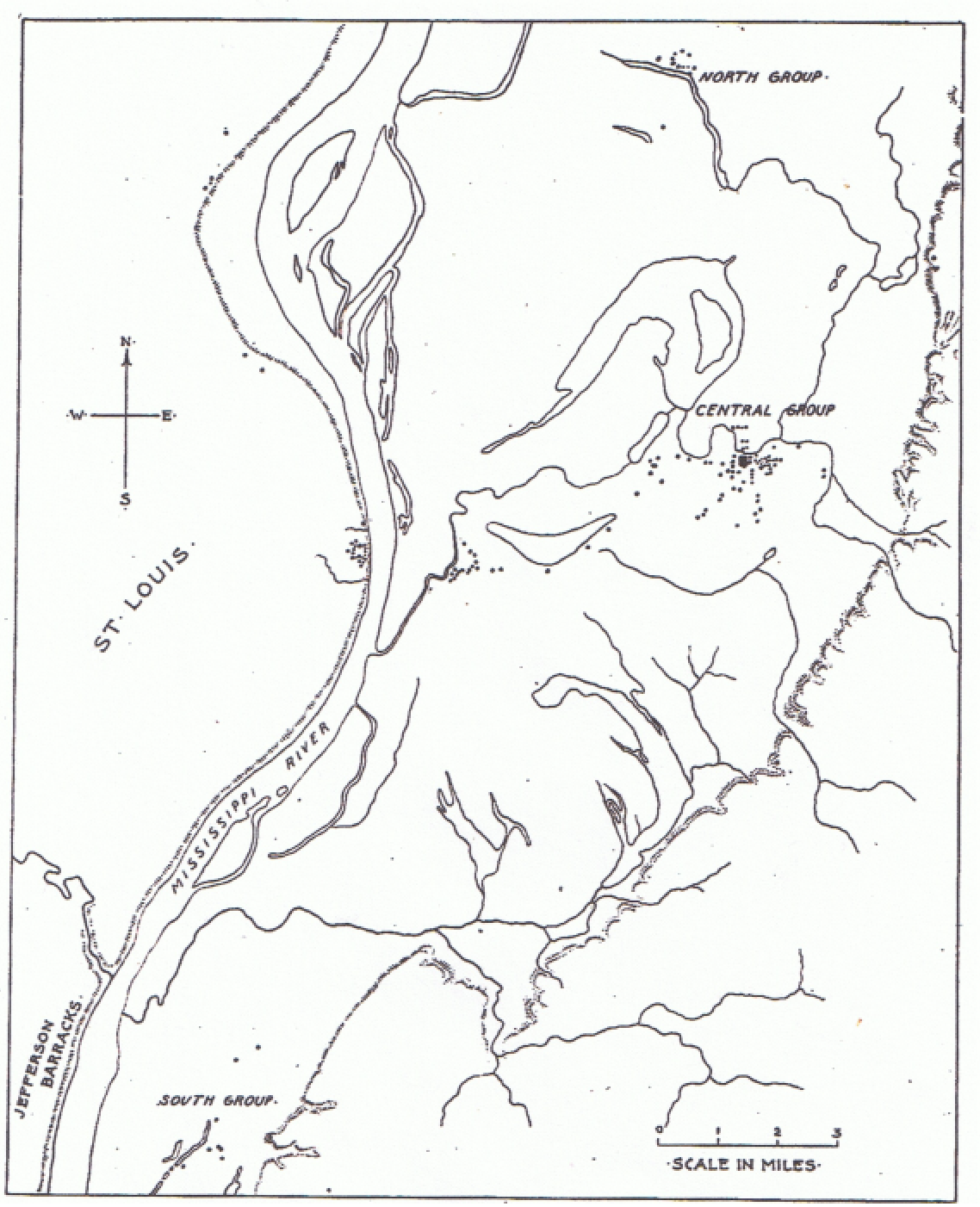

Figure 27. David Bushnell's map showing the locations of mound groups in the American Bottoms. Source: Bushnell 1922:93.

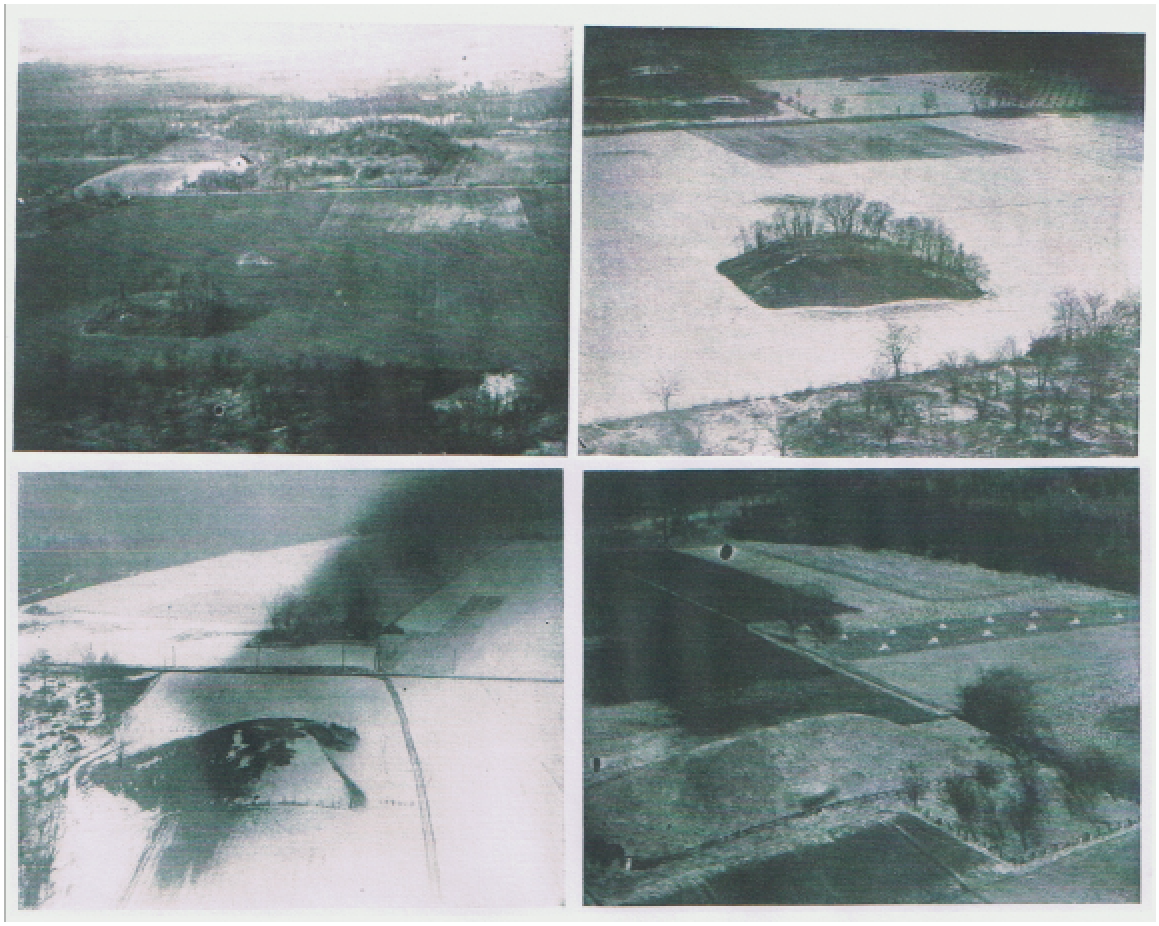

Figure 28. Four of the first aerial photographs taken at Cahokia during the winter of 1921and 1922 by Lieutenant Harold R. Wells and Lieutenant Ashley C. McKinley. These photos were included in Bushnell's "Archaeological Reconnaissance of the Cahokia and Related Mound Groups". Top left photo: Monks Mound in the north center. Top right photo: Monks Mound at top left and a rectangular mound in the center. Bottom right photo: Mound located one and a half miles west of Monks Mound (Powell Mound). Bottom left photo: Mound north of Monks Mound, partly removed (camera pointing west). Source: Bushnell 1922:98-99.

Figure 29. One of the Goddard aerial photographs taken in 1922 of the west half of the Cahokia site shot from the east. Source: Fowler 1997:22.

have since given archaeologists and others interested in the area an opportunity to view the site as it appeared from the sky in 1922. Furthermore, from the photographs one can come to a better understanding of the soil patterns of the site as well as the locations of mounds that once existed before they were razed. It was in the 1960s that archaeologist Melvin Fowler closely examined the soil patterns revealed in these 1922 photographs, and in conducting test excavations in the location of faint white lines shown on the photographs, archaeologists were able to find clear evidence of a stockade wall that once surrounded the core of the site.

One last noticeable difference between Bushnell's two reports is that the 1904 report does not directly point out the need for Cahokia's preservation, rather he only mentions that some mounds were being cultivated and some smaller ones being taken down altogether. The 1922 report however, clearly addresses his desire and the need for the largest mound to be preserved. Calling Monks Mound "Cahokia", Bushnell writes:

> Cahokia is the largest earthwork in the United States and one of the most remarkable monuments left by the native tribes. Fortunately it remains in its original condition, practically untouched since the coming of Europeans, and in this condition it should be preserved. With each succeeding generation, as the lesser mounds and other earthworks disappear by reason of the cultivation of the soil or the requirement of the land for other purposes, this great terraced work is destined to become of greater popular interest and immediate steps should be taken to make certain its preservation" (Bushnell 1922:96).

On the following page he reiterated the message by saying, "And although many of the lesser mounds have thus lost their original form and appearance, Cahokia remains the most important and impressive native work in the Valley of the Mississippi. As the great mound now stands it should be preserved: to permit its destruction would be a calamity, and irreparable loss to future generations" (Bushnell 1922:97).

The owner of Monks Mound, Thomas Ramey and his family, like so many others, had wished to see Cahokia protected as a state park. Thomas Ramey helped advocate for the mounds' safety by addressing Cahokia's importance to others while serving as a member of the Illinois General Assembly in the 1890s. But sadly Thomas Ramey did not live to see Cahokia's mounds sheltered

in a park setting. Ramey passed away in 1899, followed by his wife nine years later. Their death brought sorrow to many, but also put individuals such as Snyder on edge as to what might happen to the property if the land was not purchased by his successors. The biggest worry was that if the Ramey heirs did not purchase the property, Monks Mound would be purchased by an East St. Louis brewery who would convert the property into a resort and beer garden (Kelly 2000:11). Furthermore, if the brewery purchased the land, there was the possibility they would honeycomb Monks Mound for the storage of their alcohol products (Kelly 2000:11). Another rumor in circulation around this time was that Monks Mound was to be taken down by steam shovels who would then use its soil to fill in low-lying areas along the American Bottoms (Moorehead 1922:37). These factors, along with the continuous worry that urbanization would eventually lead to Cahokia's destruction, prompted a bill to be introduced to the Illinois state legislators. On March 12, 1913 Representative Norman Flagg, of Moro, Illinois, introduced a bill that proposed to set aside $250,000 dollars for the purchase of 200 acres for a state park. By this point in time, a rather large number of individuals, especially from Illinois and Missouri, had become conscious of the potential destruction that would occur if nothing were done to protect the mounds.

Immediately following the introduction of the bill, numerous letters and petitions flooded into Flagg's mailbox supporting the protection of the mounds. Organizations who sent letters included The Missouri Historical Society, The Academy of Science in St.Louis, Springfield Historical Society, Cincinnati Museum Association, Granite City Commercial Club, St. Louis University, St. Louis Zoological Society, The Archaeological Institute of America, The Smithsonian Institution, and Washington University in St. Louis, only to name a few. Two Cahokia notables who sent letters of approval were David Bushnell Jr. and Clark McAdams.

A letter dated April 3, 1913, from the Chancellor of Washington University to Norman Flagg reads:

My Dear Sir:

I note that there is a bill before the Illinois Legislature providing for a State Park to be known as the Cahokia Mound Builders' Park. I very much hope that every effort will be made to pass this bill, in the interests of future generations. The monuments of the pre-Columbian American Indians are rapidly disappearing, and it seems to me that those which can be preserved should by all means be preserved. I trust that I may not be regarded as intruding, when I express the hope that the Illinois Legislature will be wise enough to preserve these preeminently valuable remains of this early people.

Yours very truly,

FREDERICK A. HALL, Acting Chancellor (Cahokia Mounds Association 1917:29).

One letter even found its way to Cahokia from Brazil and signed by the president of the Flunienense Geographical and Historical Institute, Dr.Simoeus da Silva. The body of the letter reads in part, "I think that the United States government must buy all mounds, on this region lies the biggest in the world named "Cahokia", preserving them in behalf of the sciences and the future Americanist culture" (Cahokia Mounds Association 1917:29).

Even with all of the support backing the protection of the mounds, the bill failed to pass. But the effort did not stop there. On March 26, 1914, the Cahokia Mounds Association was formed for the purpose of continuing the fight for Cahokia's preservation. The association later published and distributed a pamphlet titled "Save the Mounds" to further address their opinions to the state of Illinois and others. By 1915 the organization recruited 84 members, including Norman Flagg, Warren K. Moorehead, and Thomas Ramey's sons-Fred, Jesse, and James (Kelly 2000:14). The continued perseverance of some individuals led to the initiation of another bill to protect the mounds in March of 1915, but again it went defeated. With such an effort being put forth by many concerned individuals to protect the mounds and for good reason, you might ask why the continuous failed attempts. The failed attempts to protect Cahokia's mounds were largely in part due to one question that had been left unanswered for years. Who built the mounds at Cahokia? Before a bill was to be passed and money was to be put towards a state park, legislators insisted on answers to why the mounds at Cahokia were worthy of protection. One Illinois legislator believed a Cahokia park was unnecessary and stated, "my district needs parks for live people and the guys in that mound are all dead ones" (Young and Fowler 2000:33).

Chapter 3

Who Built the Mounds?

Since the beginning of European arrival to North America in the sixteenth and seventeenth centuries there was the occasional man who stumbled across the mounds situated on the landscape at Cahokia, stared and thought; "Who constructed these great earthen structures, and what purposes might they serve?" After Brackenridge's visit to Cahokia in 1811 along with his publication about Cahokia's mounds in the St. Louis newspapers and his description of the mounds in his *Views of the Louisiana*, the mounds slowly gained recognition. Within a span of a few decades following Brackenridge's accounts, the mounds were spoken of, written about, thought about, and visited by a number of explorers and scholars. By the mid to late 1800s, people like Patrick, McAdams, and Snyder had dedicated years of their life to their study, but there was still the lasting question of "who built the mounds?" Throughout the 1800s, especially the mid 1800s, the debate of who built the mounds was in full bloom. Because the European settlers coming into North America had not been present to witness the mounds' creation, men and women alike were prone to wonder and speculate about the possibilities of how the mounds at Cahokia and elsewhere in Eastern North America originated. Those who had any familiarity with the mounds took one of three sides concerning the mounds' origins. One opinion was that the mounds were indeed built by the ancestors of the American Indians. Another opinion was

that the mounds were built by a human race that inhabited the land prior to the American Indians and had become extinct before the presence of the colonists into North America. Some believed it was the Indians who drove this "lost race" into extinction (Silverberg 1968). Lastly, some held the belief that the mounds were nothing more than natural earthen hills, or geological features formed by the glaciers.

There was no question in the minds of those individuals who had spent some time examining the mounds as to their origin. One archaeologist, Wills DeHass, who arrived in the West in 1868 to study and explore the mounds along the Mississippi and Ohio River valleys, was fully convinced the mounds were man made and worked tirelessly to settle the debate of whether the mounds were artificial or naturally occurring. In his article *Archaeology of the Mississippi Valley,* he spoke of his prolonged efforts to settle the natural vs. artificial debate:

> Impressed with the importance of giving these investigations all the attention possible I have labored assiduously to this end. I have traversed the field hundreds of miles, over lakes, across bogs, up creeks, down streams, penetrated its geological strata and climbed long miles of tortuous bluff; have examined, located, measured and mapped over one hundred and fifty mounds, excavating many, and collecting several hundred specimens of ancient art, representing the stone age, the fictilia, the art and skill of the mound builders. This has not been unattended with labor, exposure and expense. But I have the gratification to know that the question of the mounds—whether natural or artificial—has been forever settled (DeHass 1869:292).

DeHass continued on in his writing, assuring his readers of his findings, "The proofs are clear, abundant and conclusive. Externally and internally, character, structure, position and contents all incontestably prove them the work of man's labor, industry and spirit of combined action. All, from the largest to the smallest, are the result of human agency. On this point there need be no farther cavil or doubt" (DeHass 1869:291).

Dr. John Francis Snyder was another supporter of the mounds' human mode of origin. Snyder, in 1882, correctly claimed that the "mound builders" were not an extinct race of people, nor were the mounds natural formations, but that the builders of the mounds were the ancestors of the American Indians (Fowler 1962:186). Interestingly, however, Snyder held the belief that the builders of Monks Mound had left the mound in unfinished form. Snyder assumed all platform

mounds should be one even level, and without terraces. He supposed the designer of Monks Mound had planned to level the sides and terraces, but the builders either abandoned the work because the project was too overwhelming, or decided against their semi-sedentary lifestyle, and regressed back to nomadic savagery (Snyder 1962 [1904]:270). Snyder's perception of Monks Mound's appearance is unlike Patrick's, who believed that the mound was completed as four separate and even level platforms, as seen in one of his cast-iron models (Figure 21).

Those who had the advantage to study and walk amongst the mounds such as DeHass, Snyder, William and Clark McAdams, Patrick, Rau, along with other early explorers, never argued against the artificial construction of the mounds at Cahokia. They were confident the mounds were the work of man, and most believed the culprits behind the mounds were the early American Indians. There were, however, other scholars and persons who had different opinions as to who the mysterious moundbuilders might be.

Thousands of years before the first Europeans ever arrived to North America, the brown skinned inhabitants that Christopher Columbus called Indians, had already called America home. When the first Europeans immigrated to North America, the Native Americans welcomed the newcomers with open arms and offered their friendship. But the newcomers had other plans in mind. What began as friendly relations between the two groups quickly turned ugly as the number of Europeans into North America increased, and white man's greed over land became prevalent. The Native American presence on the land was soon viewed as an impediment to progress and a hindrance to expansion. Furthermore, the majority of white men viewed Indian customs and habits awkward and absurd when compared to their own "civilized" ways. One early seventeenth century explorer, Samuel de Champlain, from his experiences in North America, wrote that the Indians possessed no sort of government or religion, were not only superstitious, but were thieves, and all of no great worth (York 1974-1975:284).

It didn't take long before the Indians were considered rivals in the eyes of America's newest inhabitants.[1] The Indians were treated poorly in nearly all regards; belittled as human beings, taken from their land and placed onto reservations, killed, and labeled with names such as "hostile savages" and "barbarians". These continuous feelings of hatred and disgust towards the Indians persevered during the height of the moundbuilder mystery in North America. Because the American Indians were the only known inhabitants of North America during the arrival of Europeans, people began to believe the only other persons capable of building the mounds must have existed in America centuries prior to European arrival, and either left the country, or became extinct when the Indian "savages" took over the country. Imaginations ran wild, and some romanticized over the possibilities of who these extinct moundbuilders were and where they came from. Many Americans during this period were certain the Indians were not intelligent enough, nor had the skills to complete a project such as mound building. Many of the artifacts coming from the mounds were thought to be too remarkable to have been made by the Indian ancestors. Because of prejudices and resentful feelings towards the Indians, most people who knew of the mounds were willing to credit anyone else as the makers, anyone except for the ancestors to the America Indians.

For instance, Josiah Priest, in his 1834 *American Antiquities, and Discoveries in the West,* expressed his belief that the mounds were built by a partially civilized nation that existed in North America prior to European arrival and differed entirely from the Indians. He suspected it was likely that ancient nations found their way to America and may have included the Polynesians, Phoenicians, Egyptians, Greeks, Israelites, Scandinavians, Scotch, or Welsh. When discussing a large earthen mound on the Ohio River, Priest wrote, "It is not credible, that this mound was made by the ancestors of the modern Indians. Its magnitude, and the vast numbers of dead

[1] Listen to track 1 on the cd accompanied with the lyrics at the end of this paper. The song was written and produced by musical artist Dave Matthews and the Dave Matthews Band, titled 'Don't Drink the Water'. The song wonderfully illustrates the common mind-set of the Europeans in North America towards the American Indians during the 1600s, 1700s and 1800s. The song is sung from the perspective of the early white Europeans.

deposited there, denote a population too great to have been supported by the mere fishing and hunting, as the manner of Indians has always been" (Priest 1833:41).

Noah Webster, writer of the first American dictionary in 1806, wrote letters to the president of Yale College, Ezra Stiles, stating the moundbuilders might be the Carthaginians or from other Mediterranean nations (Young and Fowler 2000:14). Others held beliefs that the Vikings or the Lost Tribes of Israel built the mounds. Any thought was plausible as who might have built the mounds, except the Indians.

William Cullen Bryant, an American poet who lived during the hype of the moundbuilder debate, alleged that it was the Indians who were responsible for the death and extinction of the ancient moundbuilders. In his 1832 poem entitled "The Prairies", Bryant revealed his thoughts on the long vanished moundbuilders. An excerpt from the poem reads:

> Let the mighty mounds
> That overlook the rivers, or that rise
> In the dim forest crowded with old oaks,
> Answer. A race, that long has passed away,
> Built them;- a disciplined and populous race
> Heaped, with long toil, the earth, ….

A few lines further he adds:

> The red man came-
> The roaming hunter tribes, warlike and fierce,
> And the mound-builders vanished from the earth.
> The solitude of centuries untold
> Has settled where they dwelt. (Bryant 1854/1871:131-133).

Two men who were under the opinion that the earthworks of Eastern North America were built by an extinct race of people other than the American Indians were Ephraim George Squier and Dr. Edwin Hamilton Davis. In April of 1845, Ephraim Squier, whose profession at the time was journalism, moved to Chillicothe, Ohio, after being offered a job as an editor for a weekly newspaper called the *Scioto Gazette*. Subsequent to his arrival at Chillicothe, he was introduced to the numerous earthen mounds in the vicinity and immediately took an interest in them. At first, in order to gain all the knowledge and facts he could regarding the mounds, Squier spoke

with locals who were familiar with them, but Squier soon decided he wanted to know more than what the locals were telling him. He believed the only other option to better educate himself on the mounds was to begin exploring them first hand in his spare time. Before long, Squier's mound exploration and research went from a leisurely activity to becoming his number one priority. One editor of the *Scioto Gazette* who was acquainted with Squier once stated, "All of Mr. Squier's several 'vocations' while a resident of Ohio, were made secondary to his antiquarian researches" (Meltzer 1998:7).

In Chillicothe, Squier met a physician who practiced in the area, Dr. Edwin Davis, who held the same interest in the mounds and explored and collected artifacts in his free time. Shortly after the two were introduced, they decided to partner with one another in the field exploring mounds, surveying them, and writing of their finds. By the winter of 1846, Squier and Davis had surveyed approximately 100 earthworks and excavated an upwards of 150 mounds (Meltzer 1998:20) along the Ohio and Mississippi Rivers. By 1847, the number of mounds they opened reached two hundred in number (Silverberg 1968:110). While excavating in the fields the two men made an extra effort to document their discoveries. Later, their field notes and results of their excavations evolved into a book titled *Ancient Monuments of the Mississippi Valley*. Squier and Davis' book, comprising of 306 pages, 48 hand-drawn maps and plates, and 207 wood engravings, was published and distributed by the Smithsonian Institution in Washington D.C in September 1848. This was the first publication ever to be issued by the newly established Smithsonian (Meltzer 1998:1). What Squier and Davis' writings mentioned was their opinions and thoughts on who built the mounds of the Eastern United States. After a thorough study of the moundbuilders' defensive works and sacred enclosures that were found in conjunction with some of the mounds they studied in Ohio, Squier and Davis reported that, based on the skill and knowledge needed to build the enclosures, they alleged the builders were in no way affiliated with the American Indians. In their work they reported:

> By a minute attention to their various details, we are prepared to estimate the judgment, skill, and industry of their builders. No one can rise from such an examination, except with the conviction that the race, by whom these works were erected, possessed no inconsiderable knowledge of the science of defence,--a degree of knowledge much superior to that known to have been possessed by the hunter tribes of North America previous to the discovery by Columbus, or indeed subsequent to that event (Squier and Davis 1998 [1848]:42).

In Squier and Davis' last chapter, called 'Concluding Observations', they summarized from their three years of extensive studies in only six pages that the extinct race of moundbuilders were a "numerous, stationary, and an agricultural people". They did suggest to the reader to come to his own conclusions about the origins of the moundbuilders, but too put forth their own thoughts of whom they believed the moundbuilders were by writing the following words:

> we may venture to suggest that the facts thus far collected point to a connection more or less intimate between the race of the mounds and the semi-civilized nations which formerly had their seats among the sierras of Mexico, upon the plains of Central America and Peru, and who erected the imposing structures which from their number, vastness, and mysterious significance, invest the central portions of the continent with an interest not less absorbing that that which attaches to the valley of the Nile" (Squier and Davis 1998 [1848]:301).

The third belief that persevered throughout the 1800s was the idea that the mounds at Cahokia as well as the mounds located in Eastern North America were nothing more than natural hills. There were a few geologists of this era who were under this opinion. One was Amos H. Worthen, the Director of the Illinois Geological Survey. Worthen was highly regarded as a geologist, and in 1858 he was appointed the state geologist of Illinois. One of Worthen's largest contributions was his writings in the *Geological Survey of Illinois*, an eight-volume set published between 1866 and 1890. In Volume I. of the set, Worthen discusses his travels to St. Louis, where he was able to examine a section of the large mound known as Big Mound, in the upper part of the city, before it was completely destroyed. Worthen, based on his examination of a portion of the interior of the large mound, concluded that all mounds present on the landscape in the Mississippi Valley were natural earth formations. Worthen, in 1866 wrote, " these mounds are not artificial elevations, raised by the aboriginal inhabitants of the country, as has been assumed by antiquaries generally, but on the contrary, they are simply outliers of loess and drift,

that have remained as originally deposited, while the surrounding cotemporaneous strata were swept away by denuding forces" (Worthen 1866:314). He continued further by adding, "I have very little doubt that many of the so-called *Indian Mounds,* in this state at least, if carefully examined, would prove to be only natural elevations produced by the causes above named" (Worthen 1866:315).

A professor of Geology at the University of Cincinnati in the early 1900s who believed Monks Mound was at least partially natural, was Dr. Nevin M. Fenneman. Fenneman's belief was that Monks Mound was originally a natural hill. Later, when man came along it was built upwards to its present height. In 1911 Fenneman wrote, "To a height of thirty-five feet above its base the material of Monks Mound shows assortment and stratification, which is evidently natural. Above that height it affords no structural evidence bearing on the question whether it is of natural or artificial origin; but the form plainly indicates the work of man, and not of geologic processes (Leighton 1923:65). Fenneman was also under the impression that other larger mounds were similarly altered, while the smaller and less conspicuous mounds were of natural form (Leighton 1923:65).

Another well-known geologist of the early 1900s who was under the impression that the mounds were nothing more than natural occurrences was Alja R. Crook. In a December, 1914, meeting of the Geological Society of America in Philadelphia, Dr. Crook, then director of the Illinois State Museum, presented a paper titled the "Origin of Monks Mound". In the paper Crook shared his opinions of the origins of the mounds based upon a study of some of the mounds in the Cahokia area and also from twenty-five soil borings that were placed into Monks Mound north side. A portion of his paper reads:

> Twenty-five borings were made in the north and most abrupt side…Chemical and mineralogical study of the soil, as well as paleontological and physiographical investigations, indicate that the mounds are the remnants of the glacial and alluvial deposits which at one time filled the valley of the Mississippi River in this region. It may be well to inquire if all so-called mounds in the Mississippi Valley are not natural topographic forms (Crook 1915:74-75).

Those very words stated from Crook, and moreover, other scholars astute in the field of geology holding similar opinions about the mounds, further wounded the fate of Cahokia's survival. The state legislatures were well aware of the opinions held by these geologists, and therefore refused to spend money on protecting piles of earth that had no cultural or historical value. You can begin to imagine the feelings of disappointment and frustration felt by those who knew the truth behind the mounds' origins. Those like DeHass, who had spent years fervently studying the mounds all along the Mississippi Valley, and who in 1869 reported that he forever settled the natural vs. artificial debate (DeHass 1869: 292). In DeHass' writings, without mentioning names, he angrily took a stab at those individuals who believed the mounds were natural formations:

> It is not surprising that novices should commit egregious blunders in attempting to discuss subjects they do not understand; but it is surprising that those whose position and investigations should have induced them to examine carefully the character of these works before expressing positive opinions have failed to do so. The only charitable conclusion is they never examined the mounds. No man whose opinions are worth quoting could have examined even one of these interesting monuments, and not declared, unequivocally, in favor of artificial origin (DeHass 1869:291).

During the last two decades of the nineteenth century, an extensive mound study was conducted in the United States for the purpose of settling the moundbuilder debate once and for all. During the 1800s, the myth of the moundbuilders had spiraled out of control, and the only practical solution to gain knowledge of the facts on the origins of the mounds was to conduct a widespread mound survey in the eastern United States. A research department affiliated with the Smithsonian Institution, the Bureau of Ethnology (later renamed the Bureau of American Ethnology) took responsibility for the work.

Initially, when the Bureau of Ethnology was established in 1879, their concentration of study was not at all geared towards the prehistoric mounds nor the study of archaeology, but instead was focused on the culture and life ways of the Native Americans still in existence in North

America. The founding director of the Bureau, John Wesley Powell, in 1894 explained how the Bureau became involved in archaeological investigations of the prehistoric mounds:

> When the Bureau of Ethnology was first organized the energies of its members were devoted exclusively to the study of the North American Indians, and the general subject of archeology was neglected, it being the dominant purpose and preference of the Director to investigate the languages, arts, institutions, and mythologies of extant tribes rather than pre-historic antiquities; but certain archeologists, by petition, asked Congress to so enlarge the scope of the Bureau as to include a study of the archeology of the United States, and thereupon, when the next appropriation was made, in February, 1881, the act of Congress was modified by including the italicized words in the following extract: "Add to the paragraph appropriating $25,000 for continuing ethnological researches among North American Indians the following: " *'Five thousand dollars of which shall be expended in continuing archeological investigation relating to mound-builders and prehistoric mounds.'"* (Powell 1894:XL-XLI).

At first Powell was surprised with the news. As the director, he was now responsible to ensure that archaeology was incorporated into the Bureau's studies. Nevertheless, Powell complied with the terms, and in 1882, he organized a division within the Bureau to begin the work of investigating the mounds of the eastern United States. Powell put Cyrus Thomas, state entomologist of Illinois and former college professor, in charge of the work, and sent him on his way to investigate the mounds and other ancient monuments east of the Rocky Mountains. Working alongside Thomas were a few full-time field assistants and several other men who made contributions to the work for a shorter duration of time. One of those individuals was Cahokia notable, William McAdams, who was hired by the Bureau in 1882 to make an examination of the Cahokia area for the Thomas survey. I presume that instead of Thomas visiting Cahokia and conducting explorations himself, the Bureau engaged McAdams in the labor of exploring the area. Later, McAdams reported back to Thomas who afterwards published McAdams' results in the *Twelfth Annual Report of the Bureau of Ethnology* in 1894.

Two areas of investigation at Cahokia were reported in Thomas' report. The first was William McAdams' excavations a short distance northeast of Monks Mound and the second area included

a location along the bank of the Cahokia Creek, where it was reported that, "When digging 2 or 3 feet at almost any point along this bank indications of fireplaces are found, with numerous river shells, broken pottery, and kitchen refuse" (Thomas 1894:133). Accompanying the writings was a map of the Cahokia Mound Group prepared by McAdams (Figure 30).

The Thomas survey was by all means no small undertaking. In all, the survey took approximately ten years to complete. In the course of a decade Thomas' field crew mapped, examined, and described hundreds of mound groups in a total of 22 states and in more than 130 counties. To shed light on the extent of the survey's explorations, Thomas wrote:

> Over 2,000 mounds have been explored, including almost every known type of form, from the low, diminutive, circular burial tumulus of the north to the huge truncated earthen pyramid of the south, the embankment, the stone cairn, the house site, etc. Every variety of construction hitherto known, as well as a number decidedly different in detail, have been examined…Many ancient graves and cemeteries and also several caches and cave deposits have been explored (Thomas 1894:23).

When the survey was completed, the results were published in the Bureau's Twelfth Annual Report as a single volume of work entitled *Report on the Mound Explorations of the Bureau of Ethnology* and consisted of 730 pages. For those readers who did not wish to read through the entire report, Thomas listed the most significant conclusions learned from his investigations in the beginning pages.

Written in those beginning pages was the answer to the long awaited mound builder question. Was it the Indians who built the mounds? Thomas had found the answer and it was a definite "Yes". Thomas wrote that, "the links directly connecting the Indians and moundbuilders are so numerous and well established that archeologists are justified in accepting the theory that they are one and the same people" (Thomas 1894:17). Of the evidences supporting the Indians as the moundbuilders was that when Thomas compared the ancient artifacts discovered in the mounds of the Bureau's survey with the known artifacts of the Indian tribes known to history, almost always they had similar characteristics with one another. Furthermore, when examining descriptions made by the earliest North American explorers, (like the chroniclers of De Soto's

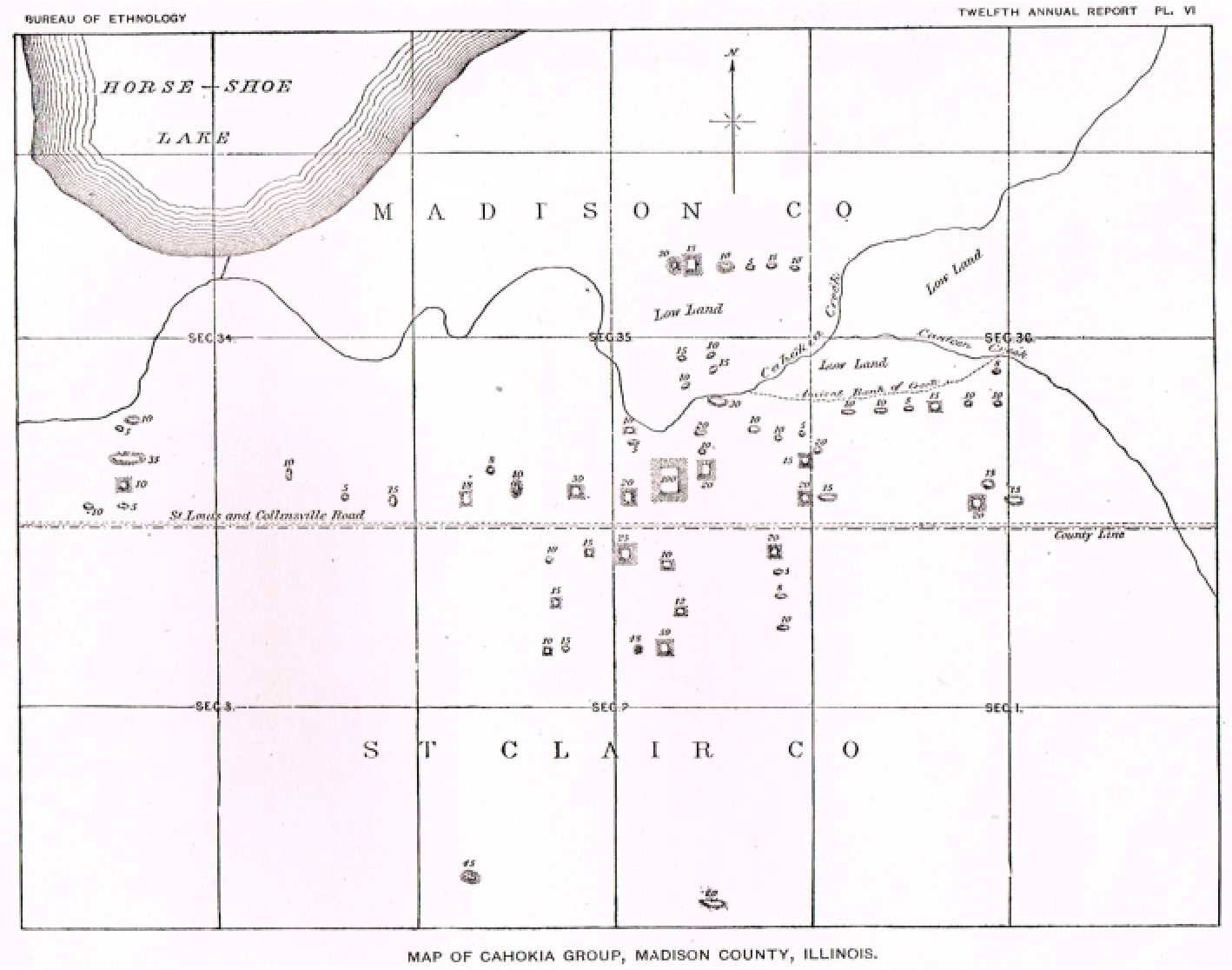

Figure 30. 1894 map of the Cahokia Group for the Bureau of Ethnology. Mound heights given in feet.
Source: Thomas 1894:134.

expedition) of the Indian habits, customs, social conditions and art, their writings corresponded with the discoveries in the mounds and other ancient works (Thomas 1894:17). With all the evidences laid out plainly on the table pointing at the Indians as the builders, Thomas had successfully put the moundbuilder myth to rest, at least for the most part. There were still yet a few individuals who had their doubts. One of whom I already mentioned, was Dr. Crook. Crook not only disregarded the idea that the Indians built the mounds, but he was also under the impression that the earthen mounds were not at all man made structures, but rather natural elevations of the earth. Back at Cahokia, Crook's opinions were putting a damper on the chances of getting Cahokia's mounds protected in a state park. Yet the locals were not ready to give up.

Chapter 4

The Moorehead Years and the Establishment of a Cahokia State Park

In 1921, Dr. John Francis Snyder and friends decided to come up with another tactic in the attempt to save the mounds at Cahokia. Together, they arranged for archaeologist Warren King Moorehead to come to Cahokia with the hope he could provide the archaeological evidence the legislators needed to purchase a portion of the Cahokia site (Young and Fowler 2000:33).

Another incident that may have encouraged Moorehead to visit Cahokia was the appearance of a newspaper article in the *Alton Telegraph* printed in January 1921, which Moorehead may have read (Kelly 2000:17). The article told readers there was to be an establishment of six memorial parks in Illinois for those who lost their lives in World War I. There had not yet been a chosen destination for a memorial park for southern Illinois and some citizens of the state wished to see Monks Mound as one of the chosen locations (Kelly 2000:17). For Cahokia's sake, the establishment of a memorial park, as opposed to a state protected park, would pose serious problems for the preservation of what lied underneath the mounds. Something needed to be done fast. Just as Cahokia's supporters were beginning to lose hope, and the gray skies over Cahokia looked as if they would never leave, a ray of sunshine emerged from the clouds. That ray of hope at Cahokia was the presence of Warren King Moorehead in the early 1920s.

In June, 1921, Moorehead stepped foot on the Cahokia "premises". Unbeknownst to himself or anyone else at the time, he would soon become a pertinent player in not only the first large scale excavations ever conducted on the site, but also be recognized in the history books as one of the largest contributors to Cahokia's initial preservation (Figure 31).

Warren K. Moorehead had a rich background of experience in the field of archaeology. Some of Moorehead's earliest encounters with archaeology occurred while he was a student for a couple of years at Denison University in Ohio, a University in close proximity to some ancient mounds. Moorehead never hesitated to dig into the nearby mounds whenever he had the opportunity. Moorehead left Denison before graduation, but managed throughout his lifetime to earn a number of honorary degrees. In 1901, he received an honorary M.A. degree from Dartmouth; in 1927 he received an honorary Sc.D. from Oglethorpe University in Atlanta, Georgia; and then in 1930 he earned an honorary Sc.D. from Denison. In the 1880s, Moorehead excavated at various sites in Ohio including Fort Ancient, where he helped ensure the site was protected as a state park. His archaeological pursuits were not always without danger. In August 1888, while excavating at a mound in Ohio, an exposed mound wall collapsed onto Moorehead, nearly ending his life (Moorehead 1893:61). After a full minute of being completely buried, crewmembers rescued him. Moorehead recalled the details of the event five years later in a brief article in *Science* Magazine titled "Buried Alive". In 1891 Frederic Ward Putnam, Director of the Peabody Museum of American Archaeology and Ethnology at Harvard University chose Moorehead to conduct excavations in southwestern Ohio for the purpose of obtaining artifacts to display at the 1893 World's Columbian Exposition in Chicago. In 1901, Robert Singleton Peabody founded the Department of Archaeology at Phillips Academy in Andover, Massachusetts, upon which Moorehead became the curator (Byers 1939:288). In 1924 Moorehead assumed the position as director of the department and held this title until his retirement in June 1938 (Kelly 2000:5). What is mentioned of Moorehead in the preceding

Figure 31. Warren King Moorehead. Source: Fowler 1997:25.

sentences is only a brief overview of his many contributions and involvements in the field of American Archaeology[1].

Being the experienced archaeologist Moorehead was, when he visited Cahokia in 1921 he immediately recognized that Cahokia with its many mounds was a diamond in the rough in terms of North American archaeological sites. This is not saying that other archaeological sites are less significant, but in comparison to Cahokia they are considerably smaller in size, and in the number of mounds they contain. As a reference, Moundville, Alabama, considered the second largest prehistoric Mississippian mound center in the United States is less than one tenth the size of Cahokia, and holds 20 mounds (Young and Fowler 2000:304). Moorehead also noticed a number of modern buildings and housing developments that lurked in Cahokia's shadows, some of which had already begun to be built near and even on the tops of a few mounds. There were only two remaining options as for the future of Cahokia. Either industries and housing would continue to move eastward and eventually wipe out Cahokia altogether, or someone had to step up and fight for Cahokia's existence. Without delay, Moorehead devised a four-point plan as a movement towards saving the mounds from further destruction. His four points were to; 1.) Gain permission from landowners to dig on their property; 2.) Inform and interest the press in Cahokia; 3.) Raise the funds necessary to begin field explorations into the mounds and; 4.) Persuade an institution, either a museum or university, to take on responsibility of future work at Cahokia.

Moorehead was successful at implementing his goals. Following his arrival, he gained permission from local landowners, including the Ramey family to conduct excavations on their land. Luckily, the Ramey family and other nearby land owners were very supportive to the idea of Moorehead's work on their property, and whatever else needed to be done to persuade the state of Illinois to preserve the mounds. In August of 1921, Moorehead created and distributed a flier called *Help Save The Cahokia Mounds,* in an effort to gain public awareness of the existence of

[1] The background information I have written on Moorehead was retrieved from two sources; 1). Douglas S. Byers', (1939) "Warren King Moorehead" in the *American Anthropologist*; and 2) John E. Kelly's Introduction (2000) to Warren King Moorehead's *The Cahokia Mounds.*

the site and the dilemma at hand if no action were to be taken to preserve it. In addition, the flier requested contributions for Cahokia's research. As a means to raise the funds, Moorehead created a Cahokia Fund at the First National Bank in East St. Louis, where checks could be sent for the purpose of Cahokia's research. Furthermore, Moorehead was in touch with newspaper companies from St. Louis and Kansas City, as well as other Eastern States, who had access to Cahokia articles over the wire service (Kelly 2000:19). To call attention to Cahokia's need for preservation even further, Moorehead lectured at local community organizations such as the Daughters of the American Revolution and Rotary clubs (Kelly 2000:19).

Spreading the word about Cahokia soon paid off. A total of $4,800 was contributed towards the 1921 Cahokia explorations. Three institutions, The University of Illinois[2], the Illinois State Museum, and Moorehead's place of employment, Phillips Academy in Andover, Massachusetts, contributed $3,050 of the total amount raised. The remaining total came from individual donations and local institutions such as the Illinois Historical Society. Moorehead, in the preface of his 1922 Preliminary Report mentions the names of some of the contributors including a special thanks to Doctor A.R. Crook who Moorehead said, "contributed generously" (Moorehead 1922:6). It is important to note that although Crook at the time believed the mounds at Cahokia were natural features, he nevertheless supported their study and felt the mounds should be protected because they were distinctive features of the landscape.

Moorehead accomplished his final goal by making arrangements for the University of Illinois to take charge of work at Cahokia in future years. The materials recovered from Cahokia were to be curated at both the Illinois State Museum and the University of Illinois (Kelly 2000:27). Although Moorehead had achieved his four-point plan, there was still much work to be done, including the excavation process, note taking, and the state of Illinois still needed convincing that the mounds at Cahokia were worth saving.

[2] The name of the University of Illinois was changed to the University of Illinois at Urbana-Champaign in 1982. Throughout the remainder of this thesis, the author will use both names interchangeably when referring to this institution.

Prior to Moorehead's work at the site, no large-scale excavations had ever occurred. Some work had been undertaken such as William McAdams' investigations at the base of the northeast corner of Monks Mound, but nothing to the extent of the work completed by Moorehead's crew in the 1920s. Reasons for Cahokia's lack of investigations as suggested by Moorehead were; for one, the owners of the property within the Cahokia boundaries took a protective stand towards their land, and most did not allow any type of digging to occur. Secondly, the cost to run an archaeological investigation, even in the early 1900s, was expensive. Moorehead wrote in his 1922 preliminary report on the site, that to trench into the Kunnemann Mound, a mound located a short distance north of Monks Mound, cost $600 (Moorehead 1922:8). And for $600.00 the crew was only able to excavate 1/3 of the mound (Moorehead 1922:23).

Two men who assisted Moorehead in the 1921 excavations and who helped with the supervision of the fieldwork were William J. Seever and Clinton Cowen. Seever lived in the St. Louis area and was one of the men who assisted Dr. Patrick with the 1876-1880 surveys of the Cahokia area. One advantage Seever had was that by living in the area he was very familiar with Cahokia and the mounds (Young and Fowler 2000:37). Cowen was a friend of Moorehead's from Ohio, a civil engineer, and former Ohio highway commissioner (Kelly 2000:21). Other crewmembers consisted of men who worked with Moorehead in New England, and local ex-servicemen (Kelly 2000:21).

Moorehead began excavations at Cahokia in mid September 1921 and continued work until late October. Limited excavations occurred during this time at several areas across the site. Work started at the Kunnemann Mound, one of the larger mounds at Cahokia. After spending two weeks at Kunnemann, Moorehead and his crew began excavating and or testing other mounds at Cahokia, including the Smith's (Schmidt's) Mounds (numbers 30 and 31), the Edwards' Mounds (numbers 25 and 26), the Jesse Ramey Mound (number 56), one mound between the Baltimore and Ohio Railroad tracks (number 64), and two mounds south of Collinsville Road. Unfortunately, in Moorehead's report he does not specify which two mounds

south of Collinsville Road, only that he tested them. In addition to these mounds mentioned above, Moorehead briefly tested an area of land a quarter of a mile south of Monks Mound and spent several days trying to locate the prehistoric cemetery northeast of Monks Mound where William McAdams and his son Clark excavated in 1882. During Moorehead's excavations at the cemetery, Clark made an appearance and indicated to Moorehead the area where his father had dug (Moorehead 1922:23-24). Unlike the McAdams' excavations where approximately 100 whole pottery vessels were unearthed, Moorehead was unsuccessful in finding whole vessels, but instead recovered broken human skeletons, one flex burial accompanied by a half of a bowl, as well as a number of arrowheads, hammerstones, portions of Busycon shells, and fragments of galena (Moorehead 1922:24).

Other mounds Moorehead tested in 1921 were three mounds located to the north of Smith's mounds, Mounds 32, 33, and 34. He and his crew must have spent only a brief time in this location because he summarizes his work at Mounds 32-34 in one sentence by saying "We are of the opinion that this part of the site should be quite thoroughly examined, since we dug up several pottery heads of birds, etc, all of exceptional form and finish" (Moorehead 1922:24). Thirty years later a man by the name of Gregory Perino, working for the Thomas Gilcrease Museum of Tulsa, Oklahoma was excavating at Mound 34 when he discovered a pit dug through the center of the mound and several post hole pits dug, one containing a rusty tobacco can (Fowler 1997:23). Moorehead was known for placing tobacco cans in areas where he worked, so we know he was present at Mound 34, despite the fact that he wrote very little about his time there.

With the completion of the first season in late October, there were a number of things that had been accomplished. For one, Moorehead successfully followed through with all four goals he set for himself subsequent to his arrival to the site. Apparently some believed it would be impossible for Moorehead to raise the necessary funds to conduct such a project (Crook 1922:5). But despite those who doubted him, Moorehead succeeded. Secondly, one of the main purposes of Moorehead's work was to get the public interested in Cahokia and the first season's work brought

a number of visitors to the area. The 1921 season also gave Moorehead the opportunity to familiarize himself with the site and the realization that one season of work was not a sufficient amount of time to accomplish what needed to be done. While the artificial makeup of the mounds was clearly visible to Moorehead and his crew during the first season of work, beginning with the Kunnemann Mound, the evidence still needed to be presented to those individuals who had their doubts. If the artificial nature of the mounds could be proved and agreed upon by all, Cahokia would have a greater chance of being preserved. Lastly, in 1922 the University of Illinois published Moorehead's report of the first season's work under the title, *The Cahokia Mounds: A Preliminary Paper*.

It was decided by Moorehead that explorations were to continue the following year in 1922. The funding for the continued work came from the University of Illinois and all of the materials recovered from the project were sent to the University's Museum of Natural History (Moorehead 1923:9). Moorehead's plan for his work in 1922 was to gain accurate information as to the extent of the village site and to see if burials would be encountered near the surface (Moorehead 1923:12).

The 1922 season began in March and continued until May. Then in the fall work resumed in September and continued until October. The 1922 excavations were by far the most extensive of the three years Moorehead spent at Cahokia. In Moorehead's 1923 publication, he documented investigations taking place at fourteen mounds and at several village site areas located between the mounds. Furthermore, he examined a cemetery at Cahokia called The Kruger Bone Bank and tested a couple of borrow pits or lakes (Moorehead 1923). (For a more detailed description of all areas at Cahokia investigated by Moorehead see Figure 32).

The work at Cahokia did not always go without disturbances. During the course of the 1922 investigations the crowds of visitors who came to witness the excavations, at times became so overwhelming that Moorehead and his crew were forced to abandon their work temporarily and move to another location until the visitors left. In Moorehead's 1923 report he wrote, "Naturally,

Summary of Finds	Reference
Flint chips, pottery sherds, animal bones, refuse, head of a frog effigy pipe,large flat shell beads	Moorehead 1922: 18-20
Disturbed earth, charcoal, small pottery sherds, animal bone, burnt clay with impressions of reeds from which housing was build from	Moorehead 1922: 20-21
Human Skeleton; flint chips and two or three flint knives near the head and broken pottery throughout	Moorehead 1922: 21-22
Scales of copper along the base line of mound	Moorehead 1922: 21-22
Few scales of copper and fragments of highly finished pottery, the type of pottery you would find with burials	Moorehead 1922: 22
Moorehead mentions that very little was found here	Moorehead 1922: 22
Composed of gumbo and broken pottery	Moorehead 1922: 23
Broken Human Skeletons; one flex burial; one partial burial; galena, parts of Busycon shells, arrowheads, and hammerstones	Moorehead 1922: 23-24
Discovered effigy heads made from pottery and of exceptional quality	Moorehead 1922: 24
Ordinary clay that had been burned	Moorehead 1922: 24
Nothing reported	Moorehead 1923: 12
Nothing reported	Moorehead 1923: 12
Probes into mound indicated burials; burials discovered, whole pots and bowls; and village site debris	Moorehead 1923: 12, 17-18
Fragments of digging tools made of a reddish colored chert, burnt earth, ashes, and pulverized galena in the ashes	Moorehead 1923: 17
Probes into mound indicated burials; burials discovered; village site debris	Moorehead 1923: 12, 17-18
Probes into mound indicated burials; burials discovered; village site debris	Moorehead 1923: 12, 17-18
Several human burials, some pottery sherds and several grave goods accompaning burials such as shell gorget	Moorehead 1923: 12, 14-15
Disturbed earth indicating an extensive village site; black pottery most common and few red pottery fragments discovered	Moorehead 1923: 14-15
Small bowl like mass of burnt clay, pottery bowl, shallow dish, one oval stone with markings, hammerstones, and small jar	Moorehead 1923: 12, 15
Nothing reported	Moorehead 1923: 16
Pottery sherds, burnt clay, bones, and village site debris	Moorehead 1923: 16
Circular bassins and circular structures beneath mounds; Marine shells, bone awls, traces of wood pottery sherds, and animal bones discovered as well as other artifacts	Moorehead 1923: 19-27
village site debris, decayed bones, and burnt earth	Moorehead 1923: 24-25
24 burials discovered and many of those were decayed	Moorehead 1923: 27-29
some stone, some broken bones, but no pottery	Moorehead 1923: 31
few pieces of flint and one pottery sherd, but nothing else	Moorehead 1923: 31-32
16 burials were found	Moorehead 1923: 34
Only small amounts of village site debris found	Moorehead 1923: 34-35
Minimal amounts of material found	Moorehead 1923: 35-36
Pottery sherds, animal bones, ashes, unio shells, hammerstones, spalls	Moorehead 1923: 38
lots of village debris; stone celts, bone awls, arrow points, and beads	Moorehead 1923: 38-39
A lot of burnt clay discovered and lumps of clay with impressions of reeds and sticks-once the walls of house dwellings	Moorehead 1923: 39
Small amounts of chipped stone and pottery sherds	Moorehead 1923: 41-42
Nothing reported	Moorehead 1929: 21-22, 136-139,and Fowler 1997: 99
Fragments of shell, one discoidal, a flint scraper, over 150 bundle burials in very poor condition, some historic burials with remnants of wooden coffins, nails, metal buttons and buckles.	Moorehead 1929: 65-83
Minimal number of pottery sherds and a half of a dozen unworked flint spalls picked up on the northeast slope of Mound 82	Moorehead 1929: 84-85
No material found	Moorehead 1929: 76, 81-83

Figure 32. Warren King Moorehead Investigations at Cahokia Mounds

*Investigations by Moorehead and his crew based on Moorehead's preliminary reports published in 1922,1923, and 1929

*Another form of reference used in making this chart is John E. Kelly's Introduction to Moorehead, pages 24 and 25

*Mound numbers in bold print represent the current mound numbers in use at Cahokia today.

Year of Investigations	Mound number(s)	Description of Work and Locations Examined or Mounds Investigated
1921	**11**	Excavated at the Kunnemann Mound
1921	**30 and 31**	Excavated at the Schmidt's Mounds (Mound 31; larger of the two) (Mound 30; Moorehead calls the terrace or apron leading up to Mound 31)
1921	24 **(25)**	Excavated at the Edward's Mound
1921	25 **(26)**	Excavated at the Edward's Mound; trenched through the center and eight or ten test pits dug
1921	**56**	Excavation at the Jesse Ramey Mound; trench dug beginning at south base of mound North-South direction; test pits dug and augers used
1921	**64**	Mound between Baltimore and Ohio railroad tracks; eight or ten test pits dug
1921	**52 and 53**	Two mounds to the south of Collinsville Road; tested superficially
1921	N/A	Excavation at village area 600 feet Northeast of Monks Mound, the location where William McAdams dug in the 1880s
1921	**32,33, and 34**	Limited digging took place
1921	N/A	Excavation at village area 1/4 of a mile south of Monks Mound along lake or borrow pit
1922	N/A	Probed area between Mounds 23 and 43, east and west
1922	N/A	Probed area between Mounds 20 and 62, north and south
1922	**19**	Probed and excavated
1922	N/A	Excavated at the village area to the west of Mound 19
1922	**20**	Probed and excavated
1922	**21**	Probed and excavated
1922	**39**	Excavation at the Sawmill Mound; probed on the southern slope; subsequently trenches were run through the edge of mound and a large pit dug into center
1922	N/A	Testing occurred in the area surrounding the Sawmill Mound at a distance of several hundred feet
1922	82 **(77)**	Excavation at small mound south of Mound 39
1922	N/A	Prospected two low mounds to the west of Mound 48 (Moorehead did not indicate in report which two mounds these were)
1922	80 **(75)**	Ran a trench in mound 6 ft in width, and 50 ft in length
1922	**33**	Excavated at the James Ramey Mound; Total area of excavation into mound was approx. 120 ft. north and south, and 55 ft. east and west
1922	**32**	Excavated at the Temple Mound; pit sunk into bottom of mound and approximately 30 auger boring sunk into mound
1922	83 **(78)**	Excavated at the Jondro Mound; Trenched from north to south through entire mound, then from the south of the mound to northwest for 20 ft.
1922	**14**	Excavated
1922	84 **(79)**	Excavated at the Mackie Mound; a number of pits sunk 3 or 4 ft in depth
1922	N/A	Excavated at the Kruger Bone Bank; village and burial site
1922	**66**	Auger borings at the Harding Mound or Rattlesnake Mound; large mound measuring approx. 550 ft east to west and 125 ft. north to south
1922	**61**	Excavated at Mrs. Tippetts' Mound; sunk two pits and auger borings
1922	N/A	Excavated at a village area 1500 to 2500 ft. west of Monks Mound and testing over a third of a mile northeast of Monks Mound
1922	N/A	Excavated at the Wells'-Tippetts' Village Site; 100 to 200 yards south of Mound 51
1922	75 **(50)**	Excavated
1922	N/A	Testing occurred at two or three small ponds or borrow pits at Cahokia
1922	**38**	Five borings placed into Monks Mound
1927	**66**	More thorough excavations and auger testings took place at Mound 66. Supervised by Jay L. B. Taylor from April 28 to August 1, 1927
1927	**82 and 83**	Probed and excavated at two low mounds (numbers 82 and 83) to the west of Mound 66; north to south trench placed between both mounds
1927	**65**	Tested and Augered

the survey did not wish to offend any of these people, yet spectators interfered with research work, and frequently specimens disappeared" (Moorehead 1923:13).

Some visitors were more of a disturbance than others. A decade or so after Moorehead's work at Cahokia, a small article in *Science* Magazine appeared written by Moorehead called "The Divining Rod and Fakers". In it Moorehead calls to mind a few experiences he had with the visitors during his years of exploration at Cahokia. One visitor told Moorehead that he had a tool for locating Indian treasure. The man had a device in the shape of a sphere attached to the end of a leather thong. The tool he carried supposedly held the secret ingredients needed for locating the treasure. However, when Moorehead allowed him to put his device to work, it was a failure (Moorehead 1931a:42). Another visitor claimed that if Moorehead could provide him with a "thigh bone of a big Injun" he would be able to contact the spirit of that Indian. Moorehead afforded the man with a tent and a femur for his work. When Moorehead asked him later how he could communicate with a prehistoric "Cahokian" speaking only English, the man's response was that all people in the spirit world spoke the same language (Moorehead 1931a:42). These stories above are only a couple of instances of many shared by Moorehead in his article. If nothing else, they are exemplary for showing the extent of and kinds of distractions caused by some of the visitors.

In addition to Moorehead's investigations at Cahokia in 1922, he expanded his research to other locations in the American Bottoms. These areas included; The Sam Chucallo Mound in Fairmont City; The Pittsburg Lake Cemetery, six miles southeast of Cahokia; Two mounds four miles south of Cahokia called the Sullivan Mounds; and lastly an acre and a half of land called the Stockyard Site in East St. Louis.

Similar to the first season, the University of Illinois published all of the results of the 1922 field season the following year in 1923. This time, however, the report contained two parts. Part I. dealt with the progress of explorations and descriptions of work at Cahokia and Moorehead's work in other locations in the American Bottom, and was written by Moorehead. Part II.

contained critical information concerning the geology of the mounds at Cahokia and was written by Morris M. Leighton.

As early as 1921, President of the University of Illinois, Dr. David Kinley suggested that a geological examination of the mounds at Cahokia should take place. It was believed if a specialist in geology could assist Moorehead in his excavations and examine closely the composition of the mounds, then some light could be shed on the origins of the mounds. The man hired for the job was Dr. Morris M. Leighton, a geologist from the University of Illinois, later the chief of the Illinois Geological Survey. While Moorehead's excavations were in progress during the 1921 and 1922 field seasons, Leighton made several appearances to the mounds to examine both their external and internal characteristics. Four mounds were chosen for the purpose of studying their internal composition. These were the Kunnemann Mound, north of Monks Mound, the Sam Chucallo Mound, three miles southwest of Monks Mound, the Sawmill Mound, approximately 1,000 feet (304.8 meters) northwest of Monks Mound, and the James Ramey Mound, located a quarter mile east of Monks Mound (Leighton 1923). The evidence produced from Leighton's study of the four mounds could not have been any clearer. The mounds he observed were undoubtedly man-made structures. When studying the mounds' internal composition Leighton reported:

> They are mainly of fine materials—silts, fine sands and gumbo—but unassorted, lumps and masses of one kind being intercalated with materials of another kind, and bones, artifacts, flints, travertine fragments, charcoal and pottery being scattered throughout without any suggestion of a mechanical separation or orientation; the contacts of the layers are minutely jagged and not smooth; calcareous materials are mixed heterogeneously with non-calcareous materials; salt-water shells from the Gulf of Mexico occur indiscriminately with local fresh-water shells; burned layers occur at various horizons; and a long series of holes with bone refuse in their bottoms was found in one mound. Such mixture, such an arrangement, such a complex association of unusual materials, are characteristic only of man-made mounds (Leighton 1929:143).

Not only did his study of the internal composition of the mounds show evidences pointing towards human origin, but the external characteristics supported the idea as well. The slopes and bases of the mounds showed no signs of meander scars from a water source and many of the

elongated mounds he observed were arranged in such a way that their sides pointed in the cardinal directions of a compass, either east-west or north-south (Leighton 1929:142). Also, the pyramidal, ovate, and conoid shapes of the mounds were not the typical shapes one would see if formed by erosion (Leighton 1929:142). Leighton surmised that, "In the face of these evidences it is difficult to conclude other than that the mounds which have been thus far exposed are of human origin, and in the view of the external features of the others, it seems probable that they are also the product of human activity…"(Leighton 1929:143).

In addition to the four mounds examined, a total of five auger borings were placed into Monks Mound. Three of the borings were placed into the summit and two were placed into the eastern face of the mound. The five borings revealed evidence consistent with the other mounds examined, showing it too was artificial. However, because Monks Mound is so large and because the borings were unable to penetrate down to its center, Leighton believed further exploratory work needed to be completed on the mound before any conclusive statements could be made on its composition as a whole.

What might have very well been one of the most exciting parts of Leighton's geological work at Cahokia was that while he was working at the James Ramey Mound, number 33, the doubting geologist Dr. A.R. Crook was present for the mound's investigation. Together Moorehead and Leighton cut a trench approximately 100 feet (30.5 meters) long from north to south and dug the trench some 22 feet (6.7 meters) deep (Crook 1922:5). When Moorehead and Leighton trenched through the center of the mound exposing the profile walls, Crook stood watching, and during that moment and from then on became a believer that the mounds were completely artificial (Fowler and Young 2000:34). Subsequently, in May 1922, Crook published a bulletin, *The Origin of the Cahokia Mounds* presenting his latest views, and this time he sided strongly with the artificial theory of the origins of the mounds. A portion of his bulletin read:

> The west face [profile trench of the James Ramey Mound] was chimneyed and carefully hand troweled in places and minutely studied by Dr. M.M. Leighton, professor of Pleistocene geology, at the University of Illinois, and the writer. Unusual care was used

> since Leighton inclines to the idea that the mounds are artificial, while the writer has regarded them as natural. The deposits had the unpleasant tendency of sustaining Leighton's view. The face showed a fine, sandy, light colored loam 3 feet thick, underlain in succession by darker colored loam, 1 foot; grayish yellow loam, 5 feet; mottled sandy silt loam and darker laminated silt, 1 foot; undisturbed alluvial clay unknown depth. If these materials were laid down in water, leached soils would not be mixed with unleached; clay masses would not be scattered through sandy loam; pieces of flint, pottery, shells, bone and charcoal would not be found in all parts of the mass without regard to their specific gravity. The charcoal would come in the top layers; the flint, rock fragments and pottery in the bottom; and the bones and shells between. This is the crucial point. All others are subsidiary [Crook 1922:5].

Now with Crook on board and all in agreement, a bill (House Bill No. 26) was introduced to the state legislators that called for the State of Illinois to purchase 235 acres of the Ramey land, including 35 smaller mounds for a price of $250,000. By the time the bill was finalized in June of 1925, a total of $52,110 was paid to the Ramey family for 144.4 acres of their land. At first the Rameys were upset with this offer and appealed to the Illinois State Supreme Court but subsequently withdrew the appeal and accepted the settlement (Kelly 2000:42). After the state's purchase of the land, the Ramey family remained living very close by. They simply moved their farm and living quarters from the west side of Monks Mound to an area just outside of the boundaries of the new state park, to the east of Monks Mound.

With the passing of this bill came a momentous achievement for Cahokia and its supporters. Finally, the first piece of Cahokia land was protected by the state of Illinois and from this came the establishment of a Cahokia Mounds State Park in 1925. Cahokia's supporters could now rest with a little more ease in knowing Monks Mound, as well as 15 additional Cahokia mounds were now safe from development and out of harms way. The park was opened the following year in 1926, and in 1930 a Cahokia Mounds Museum was set in place at the base of Monks Mound's southwest corner. The museum, which closely resembled that of a southwestern style pueblo (Figure 33), for the most part served as a park ranger's residence. The one remaining room in the building became the museum, and put on display were various artifacts from the area. Although small in size, the museum was a promising start.

Figure 33. The first Cahokia Mounds Museum is shown in this photo as it app eared shortly after it was built in 1930. The photograph is undated, but it is believed to date to the museum's early days. Courtesy of the Cahokia Mounds Historic Site Photo Archives.

It seems Moorehead's final session of fieldwork at Cahokia was during the end of the second season in 1922. In 1923, Moorehead and his crew focused their work in three areas outside of Cahokia; the Mitchell Mounds located approximately eight miles north of Cahokia, then from Mitchell they ventured further north to a group of mounds near Wood River today called Grassy Lake (Kelly 2000:41), and lastly they excavated at some mounds in Lebanon, Illinois, today known as the Emerald Mound Group (Kelly 2000:41). In 1924, Moorehead left Illinois altogether and worked at sites near Natchez, Mississippi. Then, in 1925 through 1927 he invested his time studying a Mississippian site in Georgia, named Etowah (Kelly 2000:42). Where before Moorehead was the overseer of the work performed at Cahokia, in 1927 a civil engineer, Jay L.B. Taylor was put in charge of the investigations. During this season of work, it seems that Moorehead rarely visited the excavations at Cahokia if at all, considering no mention of his presence was indicated in Taylor's field notes (Taylor 1929). Despite Moorehead's absence, Taylor managed to do a fine job.

Taylor began excavations at Cahokia in April 1927 and finished in early August, four months later. During this period he examined a total of four mounds; Nos. 65, 66, and two low mounds to the west of 66, numbers 82 and 83. These particular mounds were chosen because the Baltimore & Ohio Railroad Company, who owned the land containing the mounds, had planned to demolish the mounds in the near future for the expansion of the railroad. Mound number 66 named the Harding Mound, more recently called the Rattlesnake Mound, was the most thoroughly examined by Taylor and his crewmembers. In 1922, Moorehead had briefly tested the mound, and due to unsatisfactory testing, he suggested further exploratory work should be carried out at the mound in the future. At one point Moorehead called the Harding Mound, "one of the finest mounds of the entire group" (Moorehead 1923:34).

The Harding or Rattlesnake Mound was a ridge-top mound, which stood 30 feet (9.1 meters) in height. Its length from north to south measured approximately 200 feet (61 meters) and its longest axis from east to west measured approximately 500 feet (152.4 meters) (Throop1928:38).

Prior to excavating into the large mound, Taylor and his crew produced a contour map of the mound and laid out a grid system for the purpose of keeping accurate horizontal and vertical controls of their work. Early on, during Taylor's survey, he was surprised to discover that the mound was not just a pile of earth built up half hazardly, but instead it was a mound built with much preparation and planning by its builders. Taylor's field notes read, "…we were surprised to find that instead of being an irregular mass of earth thrown together without regard for symmetry, No. 66 seemed to have been very carefully built up, a conviction that grew on us as the work of laying out axes and other lines progressed" (Taylor 1929:66). Taylor reported that he first became aware of the amount of carefulness put into the building of the mound when he and his crew were taking elevations of two points. One of the points was in a location 130 feet (39.6 meters) east of the center of the mound and the other point was located 140 feet (42.7 meters) west of the center of the mound. The three points (east, center, and west) Taylor chose were perfectly aligned. Surprisingly, the variance of elevation between the two points at a total distance of 270 feet (82.3 meters) was only one tenth of a foot (Taylor 1929:66). This discovery demonstrated to Taylor just how symmetrical the mound really was. During excavations near the surface of the mound's summit, Taylor and his crew encountered burials accompanied by historic nails, buttons, buckles, and remnants of wood pieces coming from the caskets. Taylor concluded that these burials were burials of Frenchmen or of the earlier settlers into the area. He afterwards took it upon himself to rebury the remains to the west of the mound. At a further depth, when trenching into the southern face of the mound, Taylor and his crew uncovered a total of approximately 150 poorly preserved burials. The burials however, were in such poor condition that the only remains saved were the crowns of about 200 teeth (Taylor 1929:74). One discoidal was discovered lying on the lower jaw of one skull. It measured approximately three inches in diameter with a thickness of one inch and was made from a type of red granite. Other materials recovered from the excavations were pieces of flint, charcoal, pottery, shell pieces, a few flint spalls, and a flint scraper.

In 1929, a final report was published by the University of Illinois, and contained reports written on Cahokia by Moorehead, Taylor, and Leighton, and a paper on the use of Molluscan shells at Cahokia by Frank C. Baker, curator of the Museum of Natural History at the University of Illinois. Part I. of the 1929 report included writings by Moorehead from the 1921 and 1922 excavations at Cahokia. These had already been published a few years earlier, but were republished as part of the 1929 final report. Part I. also included never before printed writings by Moorehead on his work performed in 1923 and his comments of the work performed by Jay L.B. Taylor at Cahokia in 1927, followed by Jay L.B. Taylor's 1927 field notes titled *Mound Technique*. Part II. of the final report included Morris Leighton's writings of his geological work at Cahokia, which had been published earlier in the 1923 University of Illinois publication. Lastly, included in Part II. as mentioned earlier was Frank C. Baker's report called *The Use of Molluscan Shells by the Cahokia Mound Builders*. Finally, each of Moorehead's reports (1922,1923, and his 1929 publication) included one map of the main portion of the Cahokia site. Years later, in the year 2000, a compilation of the 1922, 1923, and 1929 reports were reproduced in a book titled, *The Cahokia Mounds* with an introduction by Dr. John E. Kelly.

The next few paragraphs will include a more in depth look at the three separate maps included in Moorehead's 1922, 1923, and 1929 Cahokia publications (one map was included in each publication). These maps differ in some respects to the 1870s Patrick map of Cahokia and I feel it necessary to explain these differences because for many years these differences (mainly the way in which the mounds were numbered) caused those studying the site a great deal of confusion. It is my hope one would not be confused by this comparison, but rather made conscious of these differences. Afterwards, I will explain some details of a 1966 map produced of the Cahokia site and the mound numbers used by today's Cahokia researchers.

As mentioned earlier, beginning in 1876, Dr. John J.R. Patrick of Belleville, Illinois hired surveyors for the purpose of producing an accurate map of the entire Cahokia site as well as maps of other mound centers outside of Cahokia. When finished, the surveyors had completed a total

of five maps, three of which were associated with the Cahokia site. One of the Cahokia maps was an individual detailed map of Monks Mound, showing its dimensions and the height of its terraces (Figure 19). A second map of Cahokia, produced by Patrick's surveyors, was of the main portion of the site and included a total of 71 mounds (Figure 13). Patrick assigned one number (1-71) to each of the mounds on this map. When looking at this map, the mound numbers appear beside each mound. A third map produced of the Cahokia group was of the western limits of the Cahokia site and includes what today is considered the Powell Mound Group located approximately a mile and a half west of Monks Mound (Figure 18). Patrick did not assign numbers to the mounds in the Powell group. Both maps, the map with 71 mounds and the Powell map were separated into two units, but Patrick's design for the maps is that when placed side by side with one another they connect, presenting an entire view of the Cahokia site. A third map, Patrick's East St. Louis map connects with these Cahokia maps as well.

In the early 1920s, when Moorehead arrived to Cahokia, the Missouri Historical Society, caretakers of the Patrick maps, loaned Moorehead the map consisting of the main portion of the site showing the 71 mounds (Moorehead 1922:13). Before Moorehead returned the map, he produced a copy by tracing over the original. Moorehead's copy, when comparing the two, closely resembles Patrick's original. Moorehead's reproduction places the mounds, lakes, roads, and creeks in the same location as Patrick's map shows them. There are however a few differences. One obvious difference is that the Patrick map is more carefully drawn and shaded. A second, and more critical difference is that when Moorehead traced Patrick's map and wrote in the mound numbers, he reversed two of the numbers. Patrick's mound number 57, on Moorehead's map was given the number 59, and mound number 59 on Patrick's map, was changed to mound number 57 on Moorehead's map (Compare Figure 34 and Figure 37). Surely this was an honest mistake. All other mound numbers on Moorehead's map followed Patrick's numbering system precisely. When Moorehead's copy was completed, he included it in his 1922

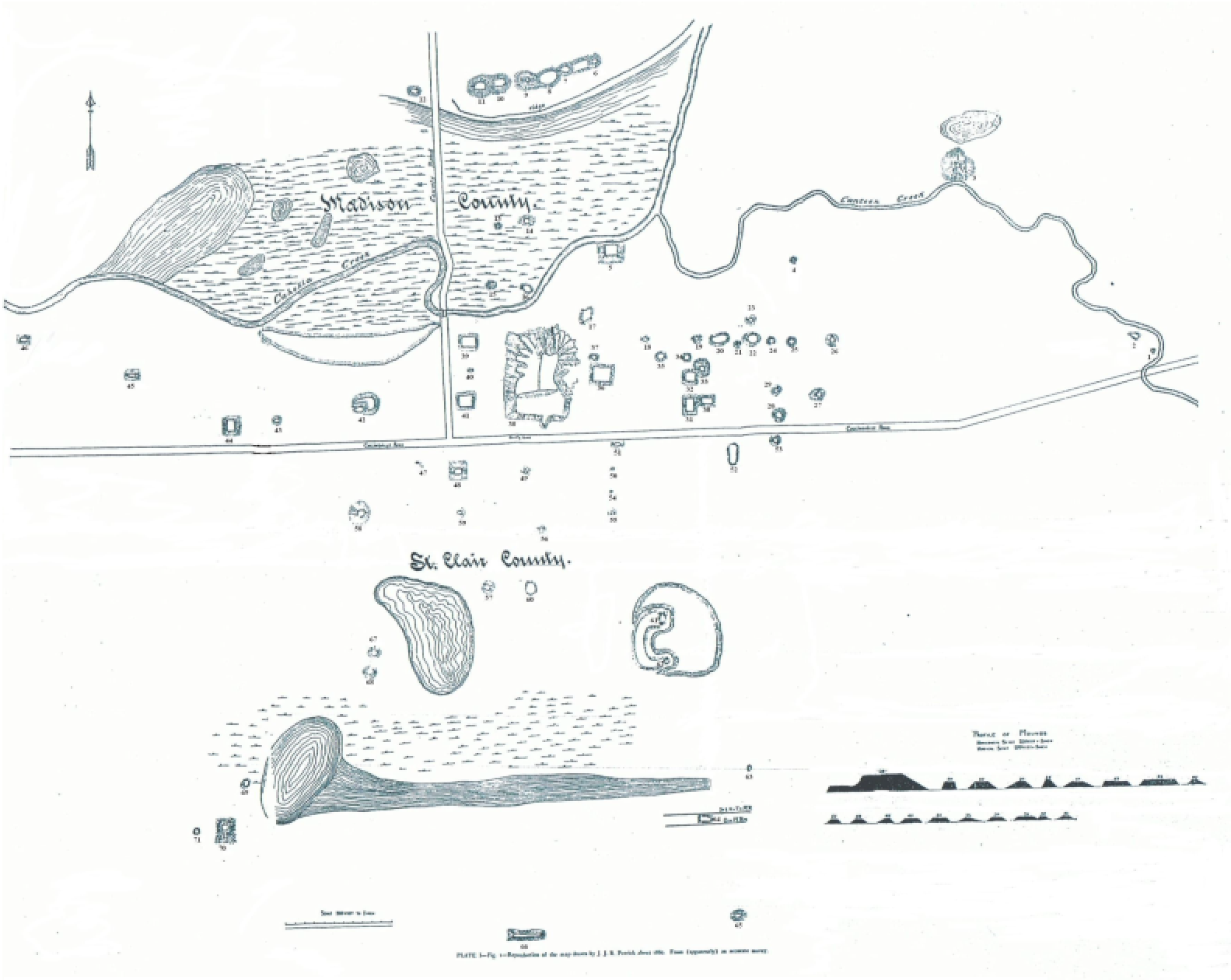

Figure 34. The 1922 Cahokia Moorehead Map. Larger mound numbers h ave been added by the author.
Source: Moorehead 1922.

report on Cahokia with the caption reading, “reproduction of the map drawn by J.J.R. Patrick about 1880. From apparently an accurate survey” (Moorehead 1922). (Figure 34).

Again, in Moorehead’s 1923 report on Cahokia, he published a copy of the Patrick map, but this time it took on a much different appearance than Patrick’s original, and than that of his 1922 copy. When comparing Patrick’s original map to Moorehead’s 1923 copy, again Moorehead had changed the way in which Patrick had originally labeled the mounds, and for unknown reasons. Patrick’s mound number 50 becomes number 75 on Moorehead’s map, Patrick’s mound number 52 becomes 73, Patrick’s mound number 53 becomes number 72, Mound 54 becomes Mound 74, Mound 56 becomes Mound 76, and again numbers 57 and 59 remain reversed. On Moorehead’s 1923 map, mound numbers 50, 52, 53, 54, and 56 are omitted completely, and replacing them are numbers 72-76 (see Figure 35). Furthermore, Moorehead noticed that additional mounds existed at Cahokia that Patrick had left out of his map, so on his 1923 map he added them. These were mounds 77-84. Then, from Moorehead’s excavations completed in 1921 and 1922 he discovered areas on the Cahokia landscape that were burial places and habitation areas. He recorded these areas on his map by labeling them village and burial sites (Figure 35).

The last map Moorehead published of the Cahokia site was in 1929 (Figure 36). Again, this map was a reproduction of Patrick’s main Cahokia map. On this particular map Moorehead went back to the way Patrick had labeled the mounds originally, numbers 1-71, with the exception of Mound 57 and Mound 59, which remained opposite to the way Patrick labeled them. The other mounds Moorehead had identified during his investigations at Cahokia (mounds not on the Patrick map), he assigned numbers 72-85. Moorehead also kept his labeling of the village and burial sites that can be seen on his 1923 map.

One noticeable difference between Patrick’s Cahokia map showing 71 mounds and that of Moorehead’s 1920s maps can be found when taking a closer look at Mound 61. On Patrick’s map, and on Moorehead’s 1922 map, Mound 61 is represented with its major axis pointing in a north-south direction. However, when examining Moorehead’s 1923 and 1929 map, the

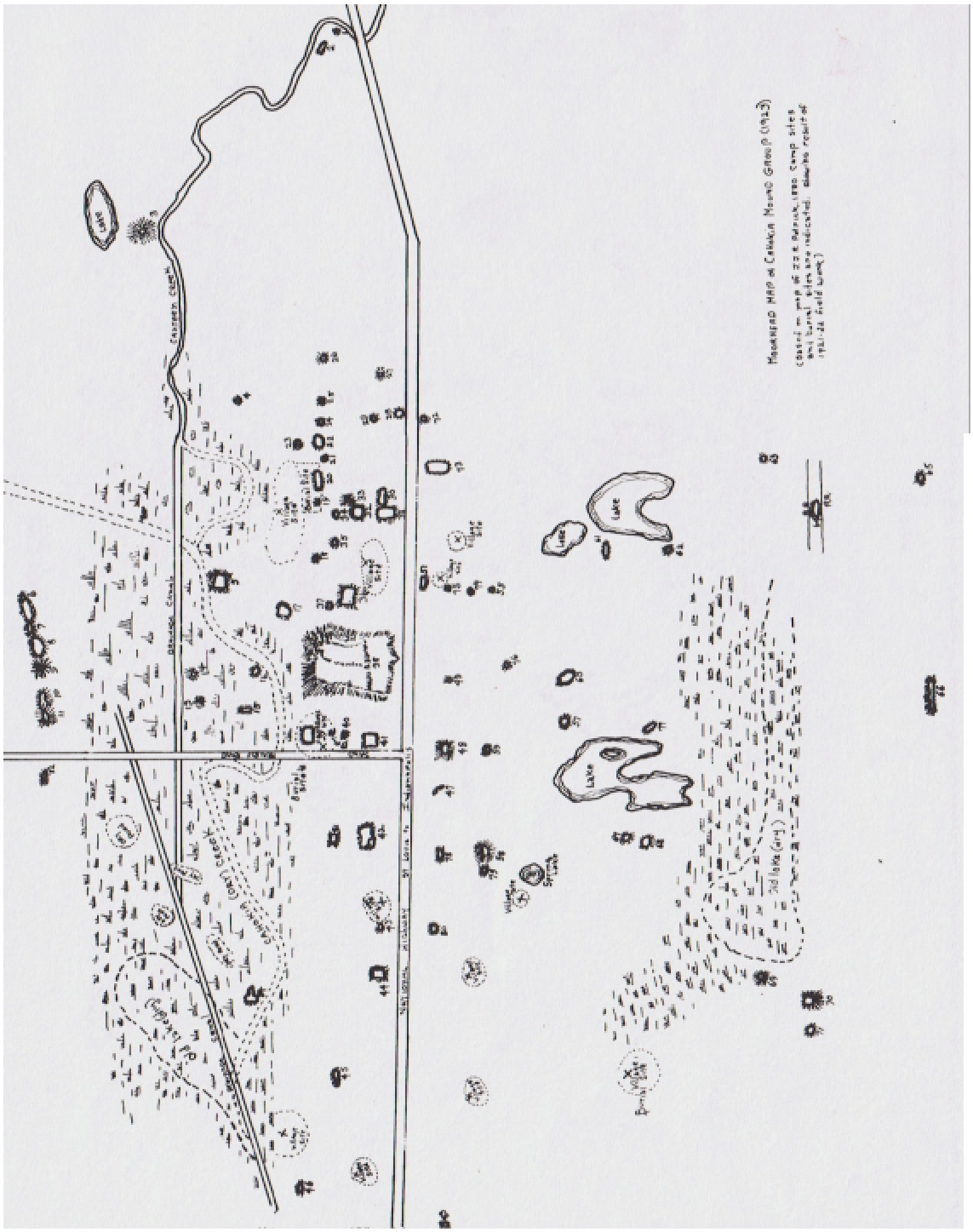

Figure 35. The 1923 Cahokia Moorehead Map. Source: Fowler 1997:51.

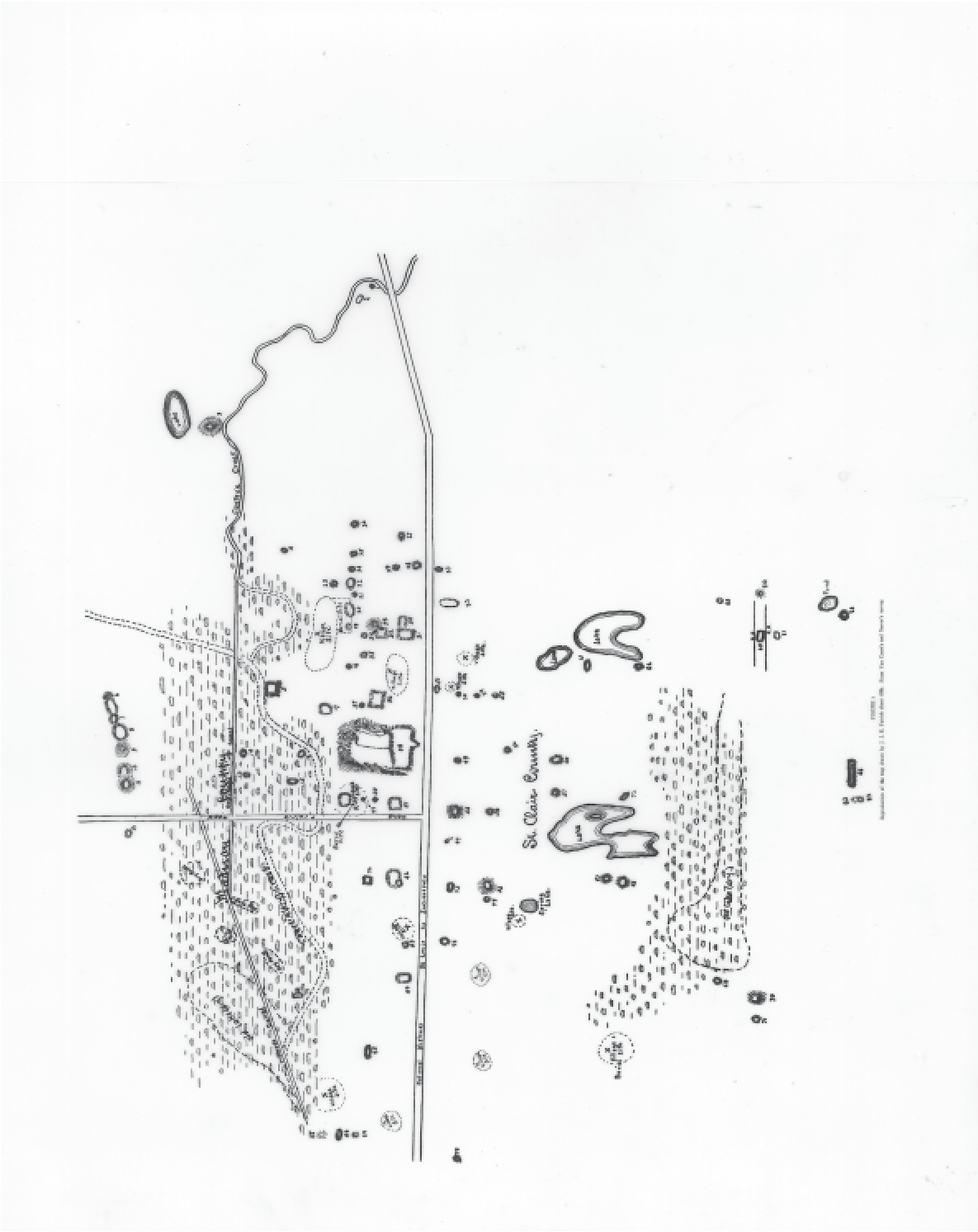

Figure 36. The 1929 Cahokia Moorehead Map. Source: Fowler 1997:52.

appearance of Mound 61 changes, showing the mound with its longest axis pointing in an east-west direction. Modern maps and an examination of this mound on the landscape indicate that the latter two Moorehead maps correctly depict this mound (Fowler 1989:45).

One of the problems Moorehead encountered when working at Cahokia was that he was unaware that there existed a second map of Cahokia, which included the Powell group of mounds. When Moorehead examined the Patrick map with 71 mounds, he supposed the Powell Mound was number 46, one of the westernmost mounds on this map. In reality, the Powell Mound was not at all existent on the main Cahokia Patrick map Moorehead had, but on a separate Patrick map held at the Missouri Historical Society.

Evidence for Moorehead's confusion can be found in his 1929 writings and on his 1929 map. When discussing the Powell Mound in 1929 Moorehead stated that he was unable to positively locate the Powell Mound on the Patrick map (Moorehead 1929:84). Yet, despite Moorehead's uncertainty, he resolved in believing Patrick's mound number 46 was the Powell Mound. Because he was under this impression, on his 1929 map he penciled in Mound 84 below mound 46 and drew Mound 85 above Mound 46 (Figure 36). Although Mound 84, 85, and the Powell mound did exist, the three were located further west. The actual Mound 46, Patrick labeled on his map in the 1870s, stood alone. Had Moorehead realized the existence of a second Cahokia map showing the Powell Mound Group of mounds, certainly this mistake wouldn't have been made.

As for the 1923 Moorehead map, there is no known reason to why he numbered some mounds differently than the way Patrick had originally numbered them on his 1870s map. I believe Moorehead's numbering confusion of Mounds 57 and 59, consistent on all three of his maps (1922, 1923, and 1929), was an accident. When observing these maps, Melvin Fowler, in his *Cahokia Atlas*, suggests ignoring the 1923 map and to focus instead on the 1922 and 1929 maps (Fowler 1997:51). According to Fowler, "the 1922 map is the more faithful copy of the Patrick map and the more accurate map of the Cahokia site. The 1929 map is an accurate reflection of Moorehead's final interpretation of the site and the areas in which he worked" (Fowler 1997:51).

In 1966, the Anthropology Department at the University of Wisconsin-Milwaukee, under the direction of archaeologist, Melvin Fowler, and with the help of a New York based aerial photography company, produced the most detailed map of the site since the Patrick map of the 1870s. The goal for the map was to detail the entire Cahokia site from mound 1 on the east to the Powell Mound area on the west, then from the Kunnemann Mound Group to the north to the Rattlesnake Mound area to the south (Fowler 1997:53). These locations are generally considered the boundaries of the Cahokia site, which covers a total of approximately six square miles. The map was created using a scale of 1:2,000 (meters) with a 3.3-foot (1 meter) contour interval (Fowler 1997:53-54). When completed, the map covered six large paper sheets and was divided into nine sections. For its creation, aerial photographs were taken, and were helpful in locating mounds present on the landscape as well as mounds destroyed in previous years. Typically, the mounds no longer existing on the landscape could be identified in the aerial photographs as a white scar on the surface of the ground. Aerial photographs taken of the site in the 1920s and 1930s were also useful in helping identify mound locations.

In all, 104 mounds were documented on the UW-Milwaukee map. The numbering system for the UW-Milwaukee map is as follows: Mounds 1-71 were numbered identical to the way Patrick labeled them on his 1870s Cahokia map, Mounds 72-85 were labeled in agreement with how Moorehead labeled them on his final 1929 Cahokia map, and mound numbers 86-104 were assigned by the University of Wisconsin-Milwaukee. As for the Powell Mound, Fowler assigned it number 86. Although Moorehead had referenced the Powell Mound in his writings and on his 1929 map as number 46, Fowler felt that number 46 on the UW-Milwaukee map should be used for the mound Patrick intended it to represent. The number 86 was therefore assigned to the Powell Mound (Fowler 1997:156). Keep in mind though, in earlier writings from the 1920s and 1930s such as Titterington (1938) and Moorehead (1929), the Powell Mound was referred to as Mound 46.

When the UW-Milwaukee map was completed in summer of 1967, it was afterwards made available to Cahokia researchers and today is still widely used for the site's study (University Wisconsin-Milwaukee Archaeological Research Laboratory 2001). I feel it is important to mention, so that there is no more confusion, that the mound numbers assigned on the 1966 UW-Milwaukee map are the numbers presently in use today.

Although 104 mounds were recorded on the UW-Milwaukee map, today it is believed that at least 120 mounds once existed within the prehistoric site boundaries (Illinois Historic Preservation Agency Pamphlet). Fowler recognized, while at work on the 1966 mapping project, the possibility that other mounds may exist in addition to the 104 mounds identified, but the evidence pointing towards this possibility are less clear cut, and therefore mound numbers have not been assigned to these features. For instance, more recent aerial photographs taken of the southern portion of the site reveal a number of small white spots on the ground, surrounding mound 66. It is likely these white scars are the locations of where mounds once stood, but Fowler suggests further investigations of this area should take place before mound numbers are attributed to them (Fowler 1997:170). In another location on the site, there exists several small elevated areas bordering a large borrow pit (named borrow pit 5-1 by the University of Wisconsin-Milwaukee). According to Fowler, it is not known whether these elevations are mounds, or natural features (Fowler 1997:172). Further investigations will need to take place in this location before it can be determined whether mound numbers should be assigned to these elevations.

In 1967, James Anderson and Melvin Fowler, both from the University of Wisconsin-Milwaukee, visited the Missouri Historical Society in St. Louis, and gained permission to photograph the Patrick maps. Their intentions when taking the photographs was to produce a reproduction of the maps, particularly for our discussion, the redrafting of the Cahokia map showing 71 mounds and the map showing the Powell group (the westernmost portion of the site). The photographs, after being taken, were enlarged and the two separate map units connected. From these enlargements a tracing was made to create a reproduction showing the two Patrick

maps connected as one. Included here is Anderson and Fowler's redrafted Patrick map (Figure 37). I have included it for the purpose of comparing Patrick's numbering system to that of Moorehead's numbering system on his 1922, 1923, and 1929 maps.

Moorehead's 1929 report marked his final contribution to Cahokia Mounds. Afterwards, he focused on archaeological pursuits in other areas of the United States. Although Moorehead wasn't physically present at Cahokia, he did keep up on the activities taking place at the site in the years to come. One piece of evidence for this can be found in a short paper written by Moorehead entitled "A Plea for the Cahokia Mounds". In it he spoke of the lamentable loss of Cahokia's Powell Mound demolished in 1931, and furthermore expressed the immediate need to purchase and preserve the remaining Cahokia mounds before further destruction could take place (Moorehead 1931b:376-377).

It is regrettable for Cahokia's sake that Moorehead decided not to extend his stay, at least for a couple of more years advocating for the site's preservation. If Moorehead had stayed, he would have likely been successful in convincing the state to purchase more property in addition to the 144 acres purchased in 1925. And had he continued in pursuit of Cahokia's preservation, the unfortunate series of events in the two decades to come, the destruction of two mounds located outside the park boundaries, the Powell Mound and Murdock Mound, may have never occurred. We could go on for a lengthy period of time debating how different things might have been had he stuck around, but the outcome had he stayed we will never know.

Before Moorehead parted ways he left his readers with one very important message for Cahokia's future. In 1929, he pleaded to his readers that "the State of Illinois, through its legislature, be earnestly petitioned to purchase certain tracts lying to the east, west, and south of the State Park. Otherwise, these remarkable tumuli will become lost to both the public and to science forever" (Moorehead 1929:13). His statement couldn't have been more accurate. The next few decades at Cahokia turned out to be ones of deep disappointment and regret.

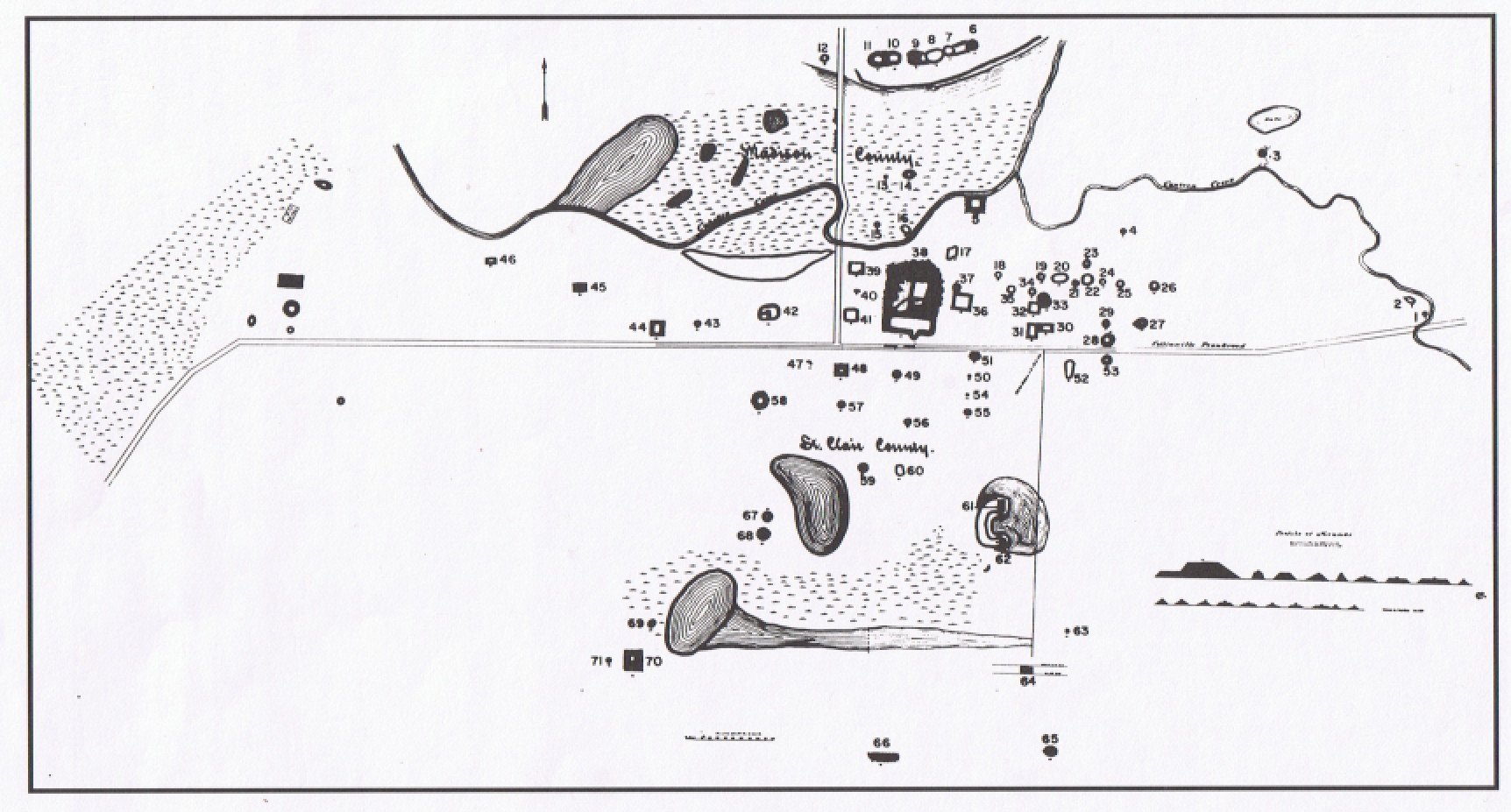

Figure 37. Melvin Fowler and James Anderson's reconstructio n of the 1870s John J.R. Patrick Map. This map includes 71 mounds of the central portion of Cahokia assigned by Patrick and the unnumbered mounds of the Powell Group to the west. The original Powell map was on a separate sheet, but Patrick had intended i t to connect with the main Cahokia map. The two are connected on this map. Larger mound numbers have been added by Melvin Fowler. Source: Fowler 1997:43.

Chapter 5

The Razing of Two Mounds

If you were to ask someone who is both knowledgeable on the topic of Cahokia's early history and sympathetic towards Cahokia's preservation, "What happened at Cahokia during the 1930s and 1940s?" their response would likely contain feelings of sadness and disappointment for reason that the 1930s and 1940s were two of the most regrettable decades in Cahokia's history. First came the destruction of the Powell Mound in the 1930s followed by the razing of the Murdock Mound in the 1940s.

In the early 1930s, two brothers, Frederick and William Powell, were the owners of a 50-acre tract of land that contained a large mound named the Powell Mound after the brothers. The mound was located a mile and a half west of Monks Mound (Figure 38). The brothers were horseradish farmers who utilized their land for planting and harvesting their crop. However, present on their land were a couple of trouble areas slowing down their work. For one, the land contained a low-lying swamp area not fit for farming, and second, a very large earthen mound in the shape of a hayrick positioned itself on the property and was taking up valuable space.

The term "hayrick" was a name often given to ridge-top mounds, and is derived from early farm wagons used to haul hay (Young and Fowler 2000:115). When the wagon was full of hay it

rose to a narrow ridge, looking very similar in appearance to the way these mounds look; hence the name hayrick.

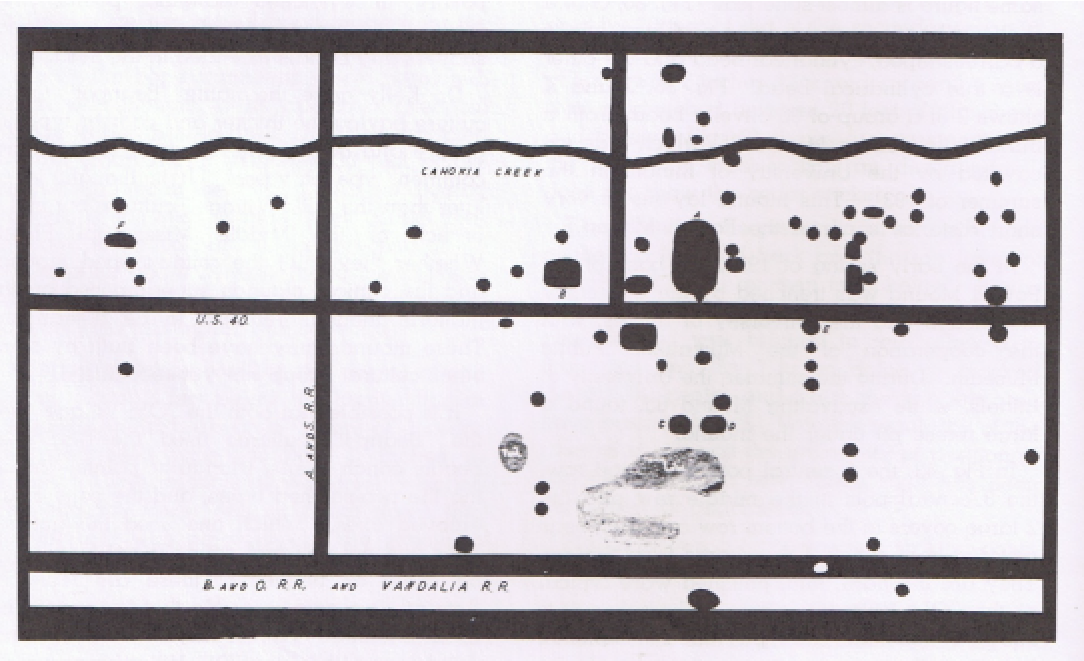

Figure 38. George B. Higgins' model of the Cahokia Mound Group. Map shows distance between Monks Mound and the Powell Mound. A. Monks Mound; F. Powell Mound. Source: Titterington 1938:16.

The Powell Mound measured 310 feet long (94.5 meters) (east to west) 180 feet wide (54.9 meters) (north to south), and stood 40 feet (12.2 meters) tall (Titterington 1938:13), making it the second largest mound at Cahokia (Figure 39). The Powell brothers realized it would be to their advantage to level the mound to the surrounding plain and use the mound remnants to fill in the low area on their property. If this were to be done, the entire tract of land could be successfully farmed. At the same time the brothers were aware that the mound could potentially be significant to science. Before any plans were made for the mound's destruction, the brothers made a standing offer to any institution who wished to study the mound. Their offer was that for a price of $3,000 dollars, and for three years of time, any interested institution could enter onto their property to investigate the mound. The only condition to their offer was that when the institution was finished with their work, they would remove the mound from its original location and

transport the dirt to the low area of land on their property. For three years, the brothers waited for someone to take an interest in their offer, but no one seemed to be aroused. Even if any university or museum did take an interest, little to no funding was available to support such a project (Titterington 1938:13).

Figure 39. 1922 Aerial photograph of the Powell Mound taken prior to the mound's destruction. Photograph by Lieutenant George Goddard of the U.S. Army Air Service. Photograph taken looking east. Source: Fowler 1997:27.

At one point it appears that the state of Illinois did take an interest, and wanted to buy the mound along with a 50-foot (15.2 meter) margin around its base and a road leading from the mound to Collinsville Road. However, it seems that the state during this time might have been low on funds because Mr. Seever, a friend of Moorehead, had offered to buy the mound and the surrounding tract of land, keeping it until the state could reimburse him (Moorehead 1931b:376). But the purchase of only the mound and road, as proposed by the state, would have cut an odd shape out of the Powell brothers land making it more of an obstacle to farm than initially, so the brothers turned down their offer. Instead, they responded by offering the state the opportunity to purchase their entire farm. An offer such as this today, under the same circumstances, would in

no way be refused. The Powell's land held not only a very important mound part of the larger Cahokia complex, but moreover the surrounding property and the mound itself contained a gold mine of information below the surface that could be used later to assist archaeologists in understanding more about Cahokia and its prehistoric residents. Even if no archaeological work were to be ever undertaken on this mound, preserving it would have added charisma to the Cahokia landscape and would have also served as an attraction for the future visitors of Cahokia, similarly as Monks Mound does today. Both Seever and Moorehead were aware of the mound's significance, and urged for its preservation in a state park (Moorehead 1931b:376). Even Seever went as far as offering to loan his own money to the state to ensure the mound's protection, but despite his generosity, nothing came of it. It is unfortunate that the state of Illinois in the 1930s was unable to purchase the Powell's entire farm.

With the state and the brothers at a standstill on the issue for some time, rumors began to build on the possibility of the state condemning the property. When the brothers caught wind of the rumor, they were infuriated, and immediately began to make plans for the mound's removal.

In December of 1930, the brothers hired a steam shovel operator to begin the process of razing the mound. The operator was instructed to begin work on the north side of the mound for reason that the north side of the mound pointed away from Collinsville Road (U.S. 40) and therefore would not attract the attention of drivers who passed by the Powell's property. The brothers' scheme was in large part a success. For eight days no local or passerby realized the mound was under demolition. From a driver's perspective traveling down Collinsville Road and looking to the north, the mound appeared in one piece. Finally, after eight days of steam shovel activity, Dr. Paul F. Titterington, a radiologist and avocational archaeologist from St. Louis, discovered what had been going on and promptly relayed the news to the University of Illinois. The University responded, but was slow to take action. Demolition of the Powell Mound was in progress for a total of sixteen days before the Archaeology Department at the University sent Dr. A.R. Kelly to the mound to make observations (Titterington 1938:13-14). In an effort to gain as much

knowledge as possible on the mound's internal contents, Titterington spoke with the workers who were present during the first days of the demolition. He learned that nearly from the start of the project the workers noticed a black humus line four inches thick beginning near the base of the mound gradually rising up the side, and stopping at the halfway point of the mound (at approximately 20 feet in height). From there the line cut horizontally across the longest axis of the mound and then sloped downward until reaching the base on the opposite end of the mound (Figure 40). What this black line indicated to Kelly and Titterington was that a smaller rectangular, flat-topped mound once existed inside the Powell Mound. The thickness of the humus line, suggested that the mound surface was stable for a sufficient amount of time to allow for the build up of organic debris from human occupation (Ahler and Depuydt 1987:3). From the humus line, the prehistoric builders added a 20-foot addition, bringing the mound to its finished form at 40 feet (12.2 meters) in height. The workers also told Titterington they noticed a considerable amount of reddish burnt clay on the western edge of the mound directly above the humus line. Titterington believed that the clay was either the surface of a prehistoric burnt house or a fireplace (Titterington 1938:14).

Figure 40. The razing of the Powell Mound. The black humus line at the center of the mound is clearly visible in this photo. Photograph by the University of Illinois. Source: Titterington 1938:39.

The first burial site witnessed, located directly above the humus line, was a group burial consisting of bone fragments, thousands of marginella shells, and a few beads made from the columella of a conch shell. Sadly, this burial was completely destroyed by the machinery before any further observations could be made.

Another discovery was a preserved cedar post found three feet below the humus line, a short distance west of the center of the mound. The post measured six inches in diameter. Unfortunately, during demolition the steam shovel hit the post causing it to break into two pieces and as a result left only a partial section of the post in place. The top of the remaining post when measured down to the edge of the dirt was recorded as 18 inches in length. Sadly, the intact post piece was not saved, and no mention was made in Titterington's writings to describe the buried portion.

Years later, similar postholes and post remains have been identified at other mounds at Cahokia. One post pit was identified at Mound 72 in 1967 (Fowler 1997:145), and another was discovered during excavations on the southwest corner of Monks Mound's first terrace (Fowler 1997:101). Archaeologist Melvin Fowler found, that these posts, probably set in place by Cahokia's prehistoric city planners, were markers delineating Cahokia's major north-south axis line within the city. The wooden post, once located at the southwest corner of Monks Mound, and the post once standing at the southeast corner of Mound 72, were placed with such precision by Cahokia's city planners that when Fowler drew a straight line connecting the two, his line pointed at true north. When extending a straight line westward from the post pit found at the southwest corner of Monks Mound, the line cuts through four additional Cahokia mounds before reaching Mound 84, a mound located immediately south of the Powell Mound. It is very possible another post was erected at the location of Mound 84, marking off Cahokia's major east-west line, however excavations conducted on this mound in the early 1930s gave no mention of finding a post hole feature nor wooden post remains. When drawing a straight line from the location of the post found at the Powell Mound in the 1930s to the post feature at Monks Mound's southwest

corner, connecting it with the north-south line, the two form a 92º angle. According to two Cahokia researchers, Steven Ahler and Peter DePuydt, such an alignment indicates that the Powell Mound was linked to the overall geographic orientation of the Cahokia site at least as early as the first major construction stage of the mound and possibly much earlier (Ahler and DePuydt 1987:5).

While Titterington was making observations at the Powell Mound, he and Kelly were given permission to examine more closely the profile of a second group burial found in the mound immediately above the humus line, and located one third of the way into the mound from its eastern edge. For better viewing, Titterington, Kelly, and a few other observers stood in the claw of the steam shovel and were raised to an even level with the burial. Titterington, in his 1938 publication entitled, *The Cahokia Mound Group and Its Village Site Materials* described what he witnessed when they approached the burial:

> Our impression of what we saw was that cedar sticks, about 1 inch in diameter, had been laid down parallel to each other about 3 feet apart on the top of the humus line. These had been covered over with layers of bark and the burials placed on top of the bark. The burials were covered by from 1 to 5 layers of Marginella shells. These shells were in such definite rows, and covered areas sufficient in size, to suggest that they had been attached to garments or robes. Over the top layer of shells was a layer of bark, and above this was the secondary mound (Titterington 1938:14).

Many artifacts were found both during and after the demolition of the mound. The types of artifacts recovered included beads made from the columella of conch shells, Marginella beads, shell pendants, and a large number of pottery sherds. Two of the more intriguing artifacts found were two small spindle-shaped artifacts made from cedar wood. The triangle shaped cones on either end of the spindles were covered in copper and one of the spindles had a preserved piece of a leather strap tied to its center. Titterington in his writings made no speculation on what these spindle shaped objects might represent, but he did include a photo of the two artifacts in his 1938 publication and I have included them herein (Figure 41). A.R. Kelly, on the other hand, wrote in 1933, that the wooden copper spools were interpreted to be ear pendants (Kelly 1933:101).

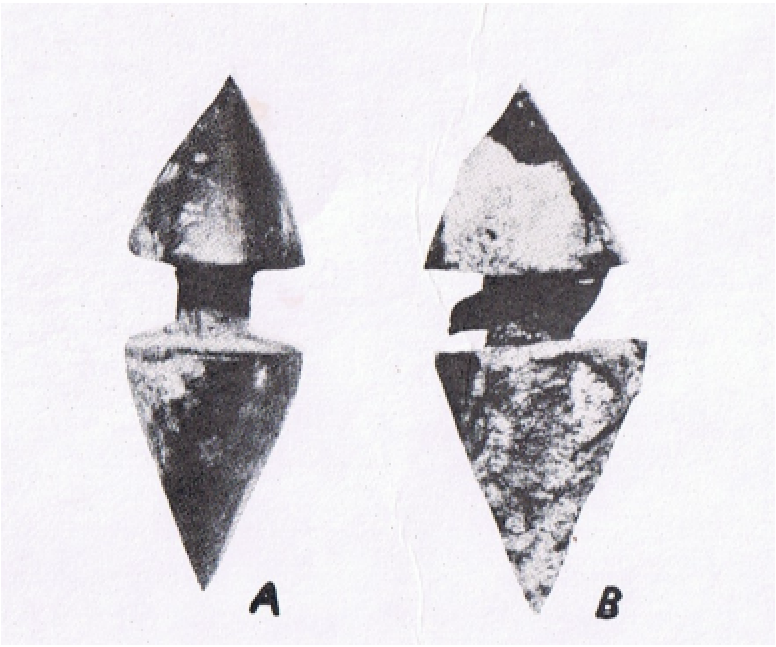

Figure 41. Spindle-shaped objects from the Powell Mound. A. copper removed; B. copper and leather strap intact. Source: Titterington 1938:40.

By January, 1931, only seven feet (2.1 meters) of the Powell Mound remained intact. The following month, in February, Thorne Deuel of the University of Chicago, with the help of W.C. McKern of the Milwaukee Public Museum, and the University of Illinois, gained permission from the Powell brothers to excavate into the remaining few feet of the mound.

The field techniques employed by Deuel, called for the placing of two main trenches into the mound (Ahler and DePuydt 1987:5). The longest trench ran through the mound's east-west axis, and measured over 300 feet (91 meters). The north-south trench bisected the east-west trench and exceeded 200 feet (61 meters) in length (Ahler and DePuydt 1987:5). The trenches were then divided into 5x10 foot units. I assume the 200 foot north-south trench exceeded the actual width of the mound, seeing as the mound's north-south axis measured 180 feet (54.9 meters) wide. In addition, Deuel placed two smaller trenches running parallel to, and on either side of the north-south trench, both trenches bisecting the east-west trench (Figure 42). In the trenches, Deuel's field crew recovered large amounts of village site remains, pottery sherds, stone and bone artifacts, and kitchen refuse (Kelly 1933:102). Upon an examination of the pottery sherds

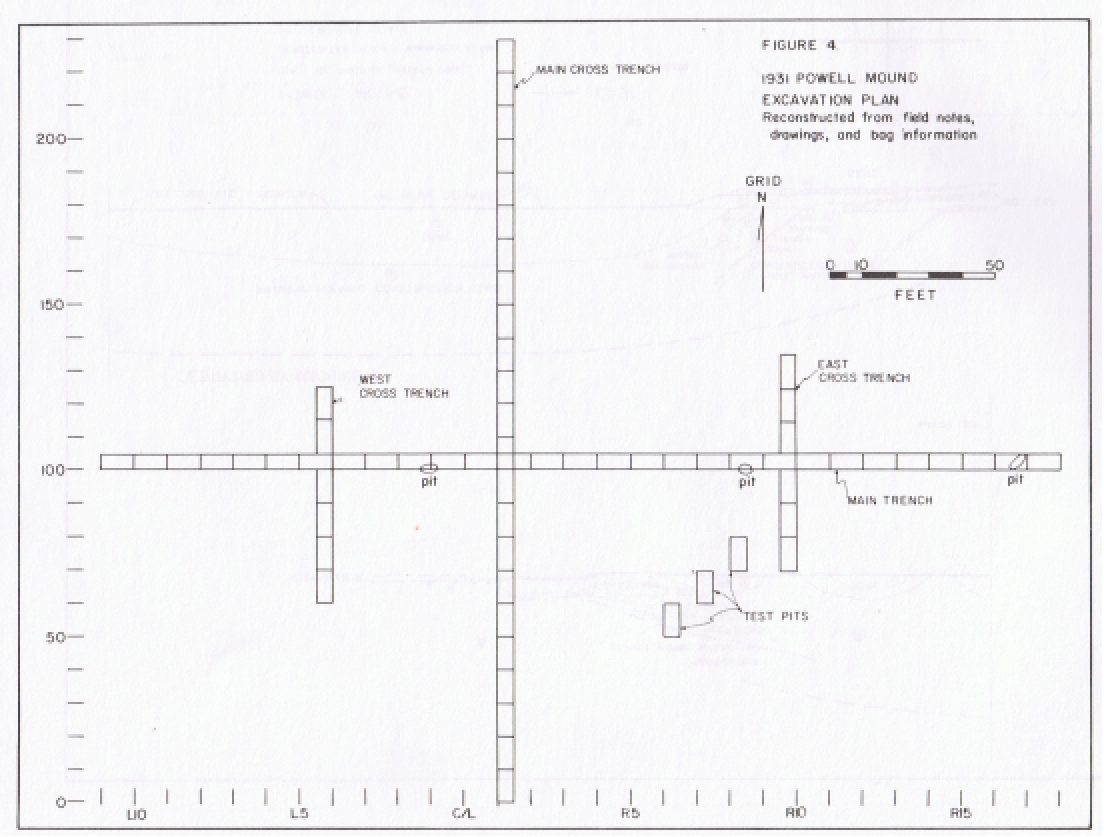

Figure 42. Units excavated in the remaining seven feet of the Powell Mound, Mound 86, by Thorne Deuel, University of Chicago and University of Illinois at Urbana-Champaign in 1931. Source: Ahler and DePuydt 1987:39.

recovered in the mound fill and in the pre-mound occupational area, it was noticed that the sherds from these locations closely resembled one another. The sherds were thick and course, and typically when pieced together they formed a straight walled beaker shaped vessel with a straight handle located either on the rim or on the upper half of the vessel (Titterington 1938:11). A few of the handles on the straight beakers were in the shape of human forearms and some took the shape of a human arm with a closed fist. Appearing too in this ceramic style were bowl shaped effigy wares whose handles were often formed into the shape of animal or bird heads, with a tail placed opposite from the head on the rim (Titterington 1938:11) (Figure 43). Because the materials coming from both the pre-mound occupational area and the fill of the Powell Mound were of the same type, it was determined that the entire mound, both fill and pre-mound area belonged to the same time period. This cultural phase and the materials associated with it was

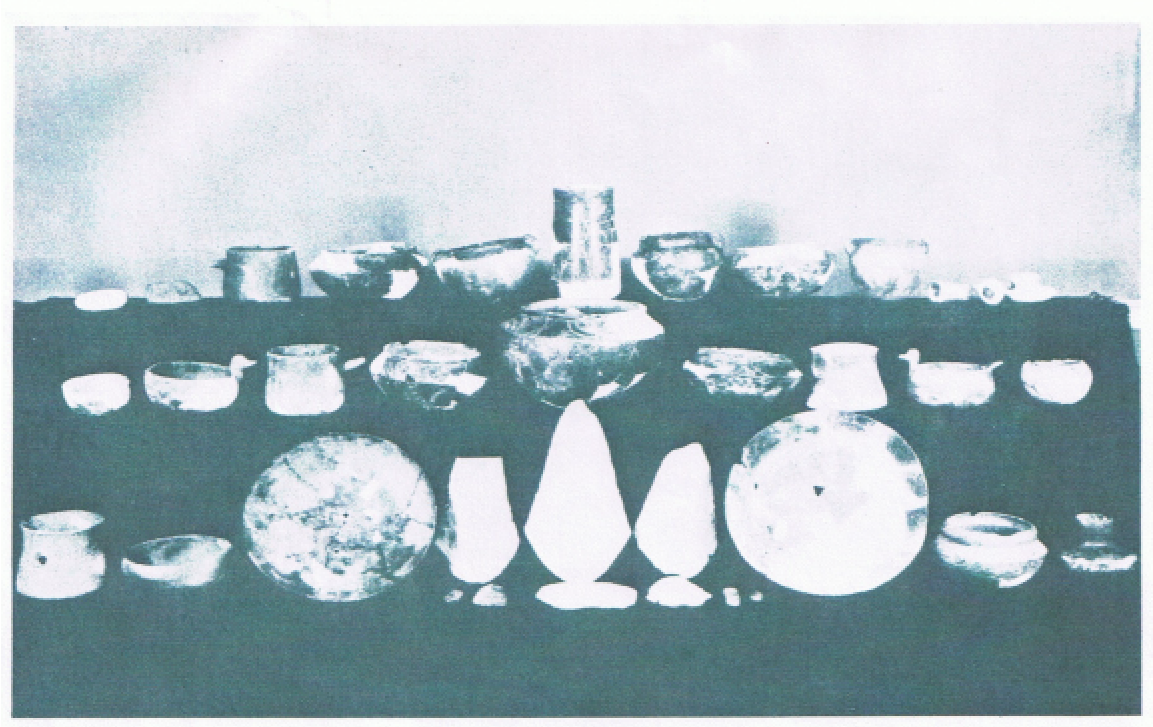

Figure 43. Cahokia pottery. The five center pieces in the top row; the three center pieces in the middle row; and the two large plate-like pieces in the bottom row, are the thin, black, polished ware of the "Old Village" Culture. All others are the coarser ware of the "Bean Pot" Culture. Photographed by the University of Illinois. Source: Titterington 1938:37.

given the name "Bean Pot" or "Trappist" culture; the name "Bean Pot" after the shape of the most common ware of this phase. Work at the Powell Mound continued into the spring of 1931. No records indicate that their excavations continued beyond that point.

In the summer of 1931, a second excavation took place at a mound (Mound 84) located just south of the Powell Mound, under the supervision of Gene M. Stirling and A.R. Kelly, both from the University of Illinois at Urbana-Champaign. Of significance from this excavation were materials retrieved from large refuse pit structures beneath the mound. The materials discovered in the pits differed stylistically from the materials coming from the mound fill above, and that of the Powell Mound materials. The pottery sherds in the pits were thin, smooth in texture, and covered in a black polished finish (Figure 39). A.R. Kelly called this culture of the pit structures "Old Village" (Titterington 1938:15) or "Pure Village Site" (Kelly 1933:102) culture, as it existed before the "Bean Pot" or "Trappist" culture.

The discovery of the pit structures beneath this mound was an exceptional occurrence. The mound had served as a protective covering, isolating, and preventing the mixture of the early village materials contained in the pit structures from the materials belonging to the later "Bean Pot" or "Trappist" culture (Kelly 1933:102). Through the discovery of these two variants in pottery types, for the first time in Cahokia's history came the understanding that there existed at least two cultural periods in Cahokia's prehistory. This basic chronology of the earlier "Old Village" and the later "Bean Pot" culture was accepted for many years, until the early 1970s when it underwent some revisions.

With the loss of the Powell Mound in the 1930s, Cahokia's supporters could only hope for a change of luck for the better in the decade to follow, but as it turned out, the 1940s came to bare witness the loss of yet another Cahokia mound, the Murdock Mound, Mound 55.

In 1940, Dr. Titterington, who had been keeping up with the events taking place at Cahokia for some time (reporting the endangerment of the Powell Mound in the early 1930s), again heard of another Cahokia mound in jeopardy, this time situated on a tract of land located just outside of the park boundaries, south of Collinsville Road and to the southeast of Monks Mound. Harry Murdock, a building contractor and owner of the property was beginning to level his land in preparation for the construction of a new subdivision he would call Mounds Acreage. The subdivision's name was misleading to say the least, for Mr. Murdock did not wish to keep the mounds existing on the property as a part of his neighborhood, but instead planned to level several mounds in the way of his new homes. One of the mounds located on the property was Patrick's mound number 55, or in more recent times called the Murdock Mound for obvious reasons. When Titterington discovered Murdock's plan to demolish this mound, he at once called Thorne Deuel who was now the chief of the Illinois State Museum. Titterington informed Deuel of the current state of affairs occurring to the southeast of Monks Mound, asking for assistance in the matter. But before Deuel could send someone out to the mound it was necessary to obtain permission from Murdock for a crew to conduct salvage excavations on his property.

Fortunately, Murdock agreed and preparations were made to begin work on the Murdock Mound in the summer of 1941. For the project, Deuel sent out one of his colleagues from the museum to take charge of the work; a position that would consist of supervising a small crew of workers from Franklin D. Roosevelt's Works Progress Administration (WPA), as well as reporting any information learned from the mound back to Deuel. The person chosen for the job was a graduate of the University of Chicago, a woman named Harriet Smith (Figure 44).

Figure 44. 1980s photograph of Harriet Smith, which appeared on the cover of a summer 1989 issue of *Illinois Antiquity*. Source: *Illinois Antiquity 1989*, Vol 23.

Smith's work at the Murdock Mound represents some of the most detailed and thorough work ever completed at the site, yet her work has never quite received the credit it deserves. In the past, many of her colleagues believed her theories on measurement and charts didn't make any sense, and for this reason her work was often criticized and neglected (Young and Fowler

2000:47-48). On the other hand, fellow archaeologist Melvin Fowler believed Smith's work was original and that her fieldwork was exceptional (Young and Fowler 2000 47-48) Under this belief, Fowler republished an expanded version of Smith's 1942 report in his 1969 publication entitled *Explorations into Cahokia Archaeology*, and her work has since gained some recognition. Today Smith's work has been documented in a number of more recent books on Cahokia, but rarely are her excavations reiterated in any great length. Because I feel Harriet Smith's work is a truly essential part of Cahokia's early history and must not be forgotten, the next several pages are dedicated to Harriet Smith's important work at Cahokia in 1941.

The Murdock Mound salvage excavations lasted a total of six months, from June 11th to December 15th, 1941. Excavations were expected to continue for a longer duration of time, but the bombing of Pearl Harbor on December 7th left Smith with a diminishing crew, who one by one parted ways from the excavation site to join the military or commit themselves to wartime jobs. Despite the abrupt end to the project, much was learned in the six months Smith devoted to the Murdock Mound.

In total, 13 stratigraphic levels were determined, five in the village area beneath the mound and eight inside of the mound itself. Furthermore, six different types of structures were found at various levels in both the village area and inside the mound.

The types of structures found at the Murdock Mound were wattle and daub type edifices. This was determined by the discovery of remains of wattle and daub in the excavations. The wattle and daub house was made by securing upright posts into the ground as a support for the walls. Laced in-between the posts were small vines or twigs called "wattle". The "daub" was a mud/clay mixture combined with grasses and straw, that when smoothed over the "wattle", made sufficient walls for a building or home (Young and Fowler 2000:46).

The earliest type of house structure found by Smith's crew was not fully investigated as the bombing of Pearl Harbor cut their project short, but they did gain some information on the appearance of this first house type. This particular structure, found in a village layer (the earliest

occupational level), contained a floor whose surface was not even with the ground level, but rather dug out to a depth of two feet. Smith suggested that this earliest type of house structure belonged to the Woodland culture (Smith 1969:53) (Figure 2).

Keep in mind, the floor of this early house structure was found at a deeper level than the present ground surface at the time of Smith's excavations in 1941. This particular floor of the earliest house was located 4 ½ feet (1.4 meters) below the 1941 ground surface. The reason for this early prehistoric ground surface existing at a substantially deeper level than the present ground surface is because over a period of time layers and strata build up over a previous ground surface, thus forming a new ground surface. Over time these older occupied village layers become buried at varying depths below the present ground surface. Several factors contribute to this accumulation of the soil, some of which include the decomposition of animal and plant remains. Also, natural forces such as wind or water can carry sediments from one place to another causing the build up of layers. Human day-to-day activities such as burning fires, cooking, or simply leaving trash sitting around, all contribute to the raising of an existing ground level. Typically, in archaeology, the deepest level of findings beneath the ground is considered the oldest, and each subsequent layer more recent.

Located above the earliest house floor, Smith located a clay sitting bench that surrounded the inside walls of the house and measured approximately two feet across. The bottom of the bench slanted towards the floor by 35 degrees. The posts, which made up the house walls, were set into this bench at approximately a foot apart from one another, and a larger post to support the roof beams was placed towards the center of the house. This house was rectangular in shape. Smith noticed that this house and others like it at the same level were oriented on an east-west line. Interestingly, all other structures above this earliest level, in both the village area and in the mound, were oriented on a north-south line (Smith 1969:56), running parallel with Monks Mound's sides. Furthermore, the Murdock Mound was oriented on a north-south axis. This

indicated to Smith that Cahokia's residents must have followed an enforced design plan for the way in which they built their homes and mounds.

In the second oldest floor underneath the Murdock Mound, Smith found a type of structure different than the previous. This building was built inside a shallow circular shaped pit 27 feet (8.2 meters) in diameter, but instead of a rectangular structure, the building inside the circle took the shape of a cross. One unique characteristic about this structure was that it was built with double walls, as if whatever was enclosed in this space was worthy of added protection. The walls were built with single set posts spaced one foot apart from one another. The inside diameter of the cross-shaped structure measured 19 feet (5.8 meters) while the outside diameter of the cross-shaped structure measured 21 feet (6.4 meters). Smith believed this structure would be too cramped for a family to occupy because of its alcoves, but suggested it might have been a storehouse (Smith 1969:56), which may explain the reasoning behind the double walls (Figure 45).

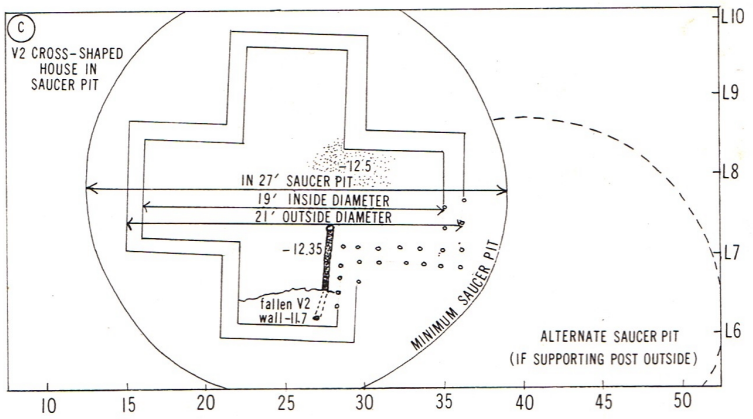

Figure 45. Harriet Smith's ground plan of a Cross-Shaped House in a Saucer-Shaped Pit located beneath the Murdock Mound, Number 55. Source: Smith 1969:54.

In the last occupied village level beneath the Murdock Mound, Smith found something out of the ordinary, not like any of the structures noted of previously. In her excavations laid two building structures, tied together by a common burned ground surface. One of the structures was a commonly occurring rectangular residence, but the other building associated with it was built in the shape of a perfect circle. The circular building's floor measured 16 ½ feet (5 meters) in

diameter and was sunk ten inches below the ground on which the wall posts stood. The walls of the circular structure were thicker in comparison with its neighboring structures. The walls were a foot wide, whereas the rectangular residences had walls approximately four to six inches in width, half the size of the circular building's walls. It was determined from the soil impressions left in the excavations, that the outer walls of the circular structure at one point were covered with mats. Evidence in the excavations showed that the mats had been tucked under the bottom of the walls of the building. On the inside of this structure there existed a fire pit almost centered on the floor that measured 2 ½ feet (0.8 meters) in diameter. Smith in her writing called this fire pit a well, as its depth measured over 16 inches deep, and consisted of perfectly vertical sides throughout. The appearance of the clay in the fire pit, as well as the appearance of the surrounding floor indicated to Smith that fires were burned inside the building either for very long periods of time or consistently.

Located only 7 feet (2.1 meters) south of the circular structure, and residing on the same burned ground surface, sat the rectangular residence associated with it. As mentioned earlier, the walls of the rectangular residence were thinner than the walls of the circular building, measuring anywhere from four to six inches thick. The fire pit, near the center of this residence, was neither as deep nor utilized near to the extent as the fire pit in the circular building. The rectangular residence, when measured from its outside walls was 19.6 feet (6 meters) (north to south) and over 21.5 feet (6.6 meters) from (west to east) (the east wall was not excavated). The entrance to this residence was located on the south wall.

Smith hypothesized based on her evidence gathered, that the circular structure she encountered in her excavations had a ceremonial related function. She came to this conclusion based on several indicators, including the structure's contrasting circular shape when compared with the other rectangular structures, extra care in its construction, thick walls, and a long burning or continuous fire at its center. The rectangular residence in very close proximity to the circular building, she surmised, might have been where a priest or clan head took up residence.

Smith dated both buildings to the Middle Mississippian period based on her examination of the buildings' architectural features. These features included wall trenches, circular clay fire pits with raised rims, and prepared clay floors (Smith 1969:58).

The next series of residences, above the village layers, were built on low platforms. The fact that these structures were built up onto platforms raised above the ground surface, suggested to Smith that this particular area to the southeast of Monks Mound was home to an elite class at this later time. The individual platforms she found were raised and expanded several times through an extended period of time, until finally they were consolidated to form a completed platform three feet in height, whose surface measured 90 feet (27.4 meters) (north to south) and 75 feet (22.9 meters) (east to west). Smith was able to determine the platform's dimensions because its surface and edges were heavily compacted and worn from long use, making its outline easily distinguishable in the excavations. The platform's sides dipped at a 30-degree angle and each corner of the platform was faceted. In the southeast quadrant of the platform Smith discovered there once existed a privacy fence. Within the fence's boundaries existed a big posthole, where a tall upright post once stood. Smith believed that ceremonies once centered on this big post.

Interestingly, in Smith's report, she stressed to the reader her belief, that when this platform was finished, at its three-foot high stage, that at least the eastern face of the lower terrace of Monks Mound already existed. She claimed that the Murdock architect, or surveyor, intentionally and with careful precision, when building this Murdock Platform, aligned its eastern face so that it would orient exactly with Monks Mound's eastern face, or at least the eastern part of Monks Mound's lower terrace (Smith 1969:66-70,87).

The three foot tall platform mound, where the fence was reported, Smith called a submound platform because it existed inside the actual Murdock Mound. After much utilization of the submound platform, according to Smith, the next phase of construction took place. This next phase, as believed by Smith, was the construction of two additional platforms, which constituted the Murdock Mound.

When Smith arrived at Cahokia in 1941, the Murdock Mound stood 9 ½ feet (2.9 meters) tall. Some early maps of the Cahokia site from the late 1800s depicted the mound at a taller height than it appeared at the time of Smith's arrival. William McAdams' 1882 map documented the Murdock Mound at a height of 15 feet (4.6 meters), while the 1894 Cyrus Thomas map recorded the mound as 10 feet (3 meters) in height. The measurements on these early maps support the idea that in the years leading up to 1941, the Murdock Mound's shape and size was transformed and reduced by the farmer's plow. Another indicator suggesting that this mound was plowed was that in the 1922 Goddard aerial photos taken at Cahokia show the Murdock Mound surrounded by a cultivated field (Fowler 1997:121).

From Smith's work completed in 1941 she concluded that the Murdock Mound in its finished form in prehistoric times, was considerably taller than 9 ½ feet (2.9 meters). Her interpretation of the Murdock Mound was that it was built up as two platforms. The first was a lower platform that measured 16 ½ feet (5 meters) tall extending on its western face and the second platform was a higher platform Smith called the Temple Mound, which stood 33 feet (10 meters) tall and occupied the east side of the mound. She came to these conclusions, based not on how the mound appeared on the landscape in 1941, but rather what she witnessed in her excavations. In her excavations she was able to discern the basal outline of the Murdock Mound, and saw that the outline of the mound had faceted corners. Also present in her excavations, in the wall profiles, remained a few feet of the mound's slopes. Because Smith could see the slopes and facets in her excavations, she used the information at hand (her known points and degree of slope), to mathematically determine the final height of the two platforms.

Just before the Murdock Mound was finally abandoned in prehistoric times, Smith hypothesized, the temple once erected on the mound's summit was burned, and eventually the temple remains plummeted down the sides resting near the base of the mound. The charcoal was retrieved from what Smith believed to be the temple remains, and dated to A.D. 1370±75years (Fowler 1997:121). According to Smith's studies, the earliest level of occupation at the Murdock

Mound took place in the Woodland period, and the burning of the temple atop Murdock Mound marked the final event to take place at the mound before it was abandoned.

Harriet Smith's commitment to detail and her application of modern archaeological methods in the field could not be matched by anyone who had come before her. Although there were some who criticized her theories, as anyone presenting new ideas has, there can be no argument as to the value of her data. Her work confirmed that the area of the Murdock Mound was once a densely populated area, occupied for a span of several hundred years. Furthermore, Smith was able to determine that their had been an arranged neighborhood plan in the Murdock area. And from her work, Smith determined that the area of the Murdock Mound was home to Cahokia's elite class. Under the great pressure of time restraints, she amassed an enormous amount of information on the Murdock Mound that may have been lost forever if not put into the trust of her capable hands. Because of Harriet Smith's dedication to her work, today the Murdock Mound is considered one of the most completely excavated and examined mounds at the site (Fowler 1997:121).

Smith's excellent work in 1941 pretty much constitutes the bulk of excavations at Cahokia during that decade, and little can be found describing any serious effort beyond hers. World War II and post war recovery took most of the nation's energy and attention. Money and able-bodied personal were diverted, and dedicated to these endeavors. The study of ancient peoples and their culture was put at a stand still during these difficult times in American history.

Chapter 6

Beyond the 1940s

Of course the rich and varied history of Cahokia Mounds does not end in the 1940s, but it is outside the scope of this paper to cover events beyond this point any fine detail here. To touch on some of the highlights occurring at the site post 1940s would be appropriate because one of the main purposes of this paper is to arouse the reader's curiosity on the topic and to interest them in further study. The next several paragraphs will, in brief, bring to light some key happenings at the site from the 1950s to present times.

Four major occurrences marked the 1950s. In 1950 James B. Griffin and Albert C. Spaulding of the University of Michigan Museum of Anthropology spent one season of work excavating into Mound 34 with a grant secured from the Viking Fund (later called the Wenner-Gren Foundation) (Fowler 1997:26). Mound 34 is a small mound and is located 400 meters to the east of Monks Mound. In 1950, Mound 34 measured about 10 feet (3 meters) in height. Griffin and Spaulding's work at Mound 34 involved the placement of three 5x10 foot units into the northern and northeastern sides of the mound. Their hope was that when examining the statigraphy in their trenches they would be able to distinguish a finer sequence in the Old Village and Trappist culture (Kelly, et al. 2007:62). To their disappointment, the ceramic types found in their trenches were for the most part equally distributed throughout their units, therefore making it impossible to

fine-tune Cahokia's ceramic sequence. A few extraordinary finds coming out of their units were two pieces of an engraved marine shell cup (the first shell cup pieces from Cahokia), and fragments of a repoussé copper plate (Kelly, et al 2007:62). When unable to renew the Viking Fund Grant to support their work for a second season, Griffin and Spaulding left Cahokia.

One interesting person who worked at Mound 34 in the 1950s was Gregory Perino. In 1956, Perino was hired by the Thomas Gilcrease Institute of American History and Art, of Tulsa Oklahoma for the purpose of securing authentic artifacts for the museum to put out on display. Although Perino was aware of appropriate methods of excavation, he frequently used a bulldozer to get the job accomplished in a timely fashion. Because the state at the time did not own the property where Mound 34 was located, the type of work Perino was involved in was permissible. Perino, with the help of his bulldozer, cut a long and wide trench into the northern end of the mound and obtained a few whole artifacts of exceptional quality. Beneath the surface of the mound, Perino located fragments of engraved shell pieces in a linear bed of charcoal he referred to as "ceremonial fires" (Kelly, et al 2007:63). Besides Mound 34, Perino worked briefly, digging into the Ramey Tract (east of Monks Mound), and spent a short amount of time examining the southwest edge of the first terrace on Monks Mound.

Another individual working at Cahokia in the 1950s was a professor from Washington University named Preston Holder. Around 1952, Holder excavated for a brief time at a mound located on the south side of Collinsville Road, and a short distance southwest of the Powell Mound. He called this area the "junk yard site", and today, in this location sits the Indian Mounds Motel. During his excavations here he discovered a single burial consisting of at least 175 individuals (Young and Fowler 2000:59). Additionally, for two summer seasons in 1955 and 1956, Holder devoted himself to the partial excavation of the Kunnemann Mound number 11, and its lower terrace to the east, labeled mound 10 on the 1870s John J.R. Patrick Cahokia map. Holder took on the project when he learned that the mound was to be leveled and its fill used for a bridge project along Sand Prairie Lane (the north-south road a short distance west of Monks

Mound) (Pauketat 1993:16). Most of the work undertaken at the Kunnemann Mound was paid for by way of a couple of small grants, but mostly at Holder's expense. Holder devoted his weekends and any free time to the mounds' study without compensation. Evidence from his excavations supported the idea that the Kunnemann Tract was an area that specialized in craft production, especially the production of shell beads. Timothy Pauketat, who wrote on Holder's work at the Kunnemann mound, believed that this area was not only a place where shell beads were produced, but also a place where complete shell necklaces were crafted (1993:106). Luckily, the county decided against using the mound as fill for the bridge, and today the Kunnemann mound still stands and is protected within the State Historic Site boundaries.

The last major event of the 1950s involved another salvage archaeology project, this time to the east of Monks Mound. In the years 1958 and 1959, mounds 30 and 31 were planned for destruction when a large department store by the name of "Grandpa's" was planned for construction in replacement of the two mounds. Again, nothing could be done to stop the mounds' removal because the land where they were located wasn't owned by the state. It was Joseph Caldwell, Curator of Anthropology at the Illinois State Museum who arrived at Cahokia to salvage what he could prior to the razing of both mounds. Assisting Caldwell with his work was a group of avocational archaeologists of the Cahokia Archaeological Society (CAS). The main focus of Caldwell's excavations was at Mound 31, also named Schmidt Mound. His excavations were limited to a single trench and a test pit (Sullivan and Pauketat 2007:14). Caldwell's trench excavations revealed that the mound was built up in 10 separate construction stages. In the early 1960s the store was built, resulting in the destruction of all but the base of Mound 31. Caldwell, who was devastated by the loss, began lobbying in Springfield for the protection of more Cahokia land. Mainly because of his efforts, a second piece of Cahokia land was added to the site in the 1960s; the first since the 144 acres purchased in 1925.

The early 1960s brought the construction of Interstates 55, 270, and 255 to Cahokia's doorstep. The highway construction was to affect three areas on the Cahokia site. These areas

were Tract 15B, (300 yards west of Monks Mound), Tract 15A (1000 yards west of Monks Mound), and the Powell Tract on the western periphery of the site. Seven miles north of Cahokia, the Mitchell site was also threatened by the highway construction. Apparently, as it later turned out, the Interstate Highway plans changed to some extent, and thankfully Tract 15A was spared major destruction.

The salvage work precipitated by these highway projects was divided between three institutions. The Illinois State Museum took on the responsibility of salvage work on Tract 15A and 15B, the University of Illinois at Urbana-Champaign was assigned the Powell Mound Tract, and Southern Illinois University at Carbondale was in charge of salvage excavations at the Mitchell Site. The salvage archaeology at all three places on the Cahokia site revealed evidence of heavy occupation from Cahokia's prehistoric inhabitants. The crews unearthed features of hundreds of house structures. On Tract 15B, besides locating numerous house structures, crews from the Illinois State Museum identified three wall trenches belonging to a large building compound. One of the most intriguing finds on Tract 15A was the discovery of a number of large oval shaped post pits. When the salvage work was completed, a closer examination of the maps produced of the area, showed that these post pit features were arranged in the shape of large circles. Once existing inside these oval pits stood large wooden posts. Dr. Warren Wittry, field director of the excavations on Tract 15A, believed that these posts set in place by Cahokia's builders, lined up with the rising sun at certain times of the year, serving as Cahokia's calendar (Cahokia Mounds State Historic Site Website 2009). Wittry called these sun calendars Woodhenges. In all, Wittry located evidence of five woodhenges in the area all built around AD 1100-1200 (Iseminger 2008:14). Of the five, Woodhenge III, located on Tract 15A, was the most complete. In 1985 Woodhenge III was reconstructed at its original location (Cahokia Mounds State Historic Site Website 2009), and today can be viewed to the west of Monks Mound.

Later, the construction of a Gem discount store threatened another area of land on the Powell Tract, in the location of where the Powell mound stood in the 1930s. A portion of what remained

of the Powell mound was excavated along with three smaller mounds to the south and southeast. Again, many house structures were uncovered, indicating that this was an area of heavy occupation.

In the mid 1960s to the early 1970s a series of excavations took place on Monks Mound. I will give mention of a few.

Some of the most extensive excavations took place on Monks Mound's fourth terrace in the mid 1960s and into the early 1970s. Supervising these excavations were Nelson Reed and John Bennett, both from Washington University, and James Porter from the University of Wisconsin-Madison. The excavations on the summit were successful in locating a large temple or house structure, the largest building found at Cahokia to date. In addition to excavations on Monks Mound's fourth terrace, a soil-coring project organized by Nelson Reed was initiated in the fall of 1965. Nelson Reed and John Bennett served as supervisors on the project while James Porter was assigned field director. The purpose of the coring was to study the internal structure of Monks Mound, and to obtain datable carbon samples from within the structure (Reed, et al 1968:138). Drilling continued into the 1966 field season. In all, 9 holes were drilled into Monks Mound and the total length of the combined core samples measured 680 feet. From a careful examination of the soil samples recovered, Reed and his associates came to the belief that Monks Mound was built up in 14 separate stages, each construction stage spanning approximately 18 years (Reed, et al 1968:146). Radiocarbon samples taken from Monks Mound produced a construction date of the mound beginning at approximately A.D. 900 and its completion around A.D. 1150 (Reed, et al 1968:137). Financial contributions and grants for the coring project came from Washington University in St. Louis, as well as from private donors, and a National Science Foundation Grant.

Around the same time, Charles Bareis, of the University of Illinois at Urbana-Champaign conducted archaeological excavations at the interface between Monks Mound's first and third terrace. Bareis' work in this area located a series of steps ascending up to the third terrace. In addition to his work on Monks Mound, Bareis headed several excavations on the Powell Tract in

the 1960s and 1970s and worked at least three seasons on a salvage project involving Cahokia's Mound number 51 (Persimmon Mound) (Fowler 1997:39).

In the summer of 1968, archaeologist Melvin Fowler assigned one of his graduate students, Elizabeth Benchley to excavate on the southwest corner of the first terrace of Monks Mound. Fowler, of the University of Wisconsin-Milwaukee, chose this particular place because he was in search of a marker post that would indicate where he believed a north-south centerline ran through the site (Fowler 1997:100). Benchley located a series of superimposed post pits in a location very close to where Fowler had predicted she'd find one. Towards the top of Benchley's excavations she recovered a number of historic artifacts, including a copper bell, lead brooches, iron keys, and glass beads, only to name a few (Walthall and Benchley 1987). Furthermore, her excavations revealed the remains of a French chapel or trading post that was built at this location on Monks Mound around the mid 1700s.

In 1971, the University of Wisconsin-Milwaukee conducted excavations on one of Monks Mound's east lobes, under the direction of Kenneth Williams. The purpose for this excavation was to determine the function of the lobes, and to see if the lobes might have been access ramps leading up to the terraces. As it turned out, the lobes were not built as ramps, but rather they were the result of Monks Mound's east face slumping sometime after Cahokia was abandoned (Fowler 1997:101). One significant find discovered inside one of the lobes was a sandstone tablet, and on it the etching of a figure of a birdman. Today the birdman tablet is the official symbol for the Cahokia site.

Besides the excavations on Monks Mound, three other major projects took place in the 1960s. The University of Wisconsin-Milwaukee undertook these projects and funding came from a National Science Foundation Grant. The first project, which has already been described to some extent in Chapter 4 of this paper, was an extensive mapping project of the site. The map, when finished, was the most detailed map of the Cahokia site produced since John Patrick's time.

The second project, was a more in depth study of some faint white lines identified in aerial photographs taken of the site in the 1920s and 1930s, also visible on photographs taken at the site in the 1940s, 1950s, and 1960s (Anderson 1969:89). Excavation units placed in the location of one of the faint lines that ran parallel with, and to the east of Monks Mound, revealed a series of trenches where numerous log posts had once been set in place by Cahokia's inhabitants. These excavations, beginning in 1966, confirmed the presence of a stockade wall in this location. As the excavations proceeded, it was discovered that in fact the stockade wall was re-built a total of three times, making for a total of four palisade walls constructed over a period of approximately 200 years (Cahokia Mounds State Historic Site Website 2009). The palisade walls also consisted of a number of evenly spaced bastions (guard towers), indicating that the wall was probably intended for defensive purposes. Excavations have since continued in following the stockade wall along the center of the site, and usually with much success. Most recently, in 2008, Dr. Mary Vermilion and her field school from Southern Illinois University at Edwardsville (SIUE), located for the first time a portion of the north wall of the palisade.

Two important individuals involved with some of the first palisade excavations were James Anderson and Bill Iseminger. Anderson was a student participant on the Tract 15A project in the early 60s, and in 1966 he held the title of field director on the palisade excavations. In 1968, Bill Iseminger joined the palisade crew, and in 1971 both Anderson and Iseminger were hired on at the Cahokia Park. Anderson continued working at Cahokia for 12 years before resigning in 1983 and Iseminger has worked at the site ever since. Today Iseminger serves as one of Cahokia's site managers and this year (2009) marks his 38th year working at Cahokia.

Both Anderson and Iseminger have contributed to the site in numerous ways. One of Anderson's many contributions was his organization of the Cahokia Mounds Museum Society in 1976, which has given support to the Cahokia site for over 30 years. Iseminger has done everything from directing excavations, to giving site tours, and speaking publicly on behalf of Cahokia's history and preservation, to name a few of his many efforts.

The last project of the 1960s was the examination of a ridge top mound to the southeast of Monks Mound designated Mound 72. Some of the most significant finds from the mound was the discovery of a large post pit delineating Cahokia's major north-south line, and two groups of burials. The central focus of one of the group burials was a male individual lying on a bedding of shell beads. The beads beneath him took the shape of a bird or falcon, and when counted the number of beads totaled over 20,000. To the southwest of this group burial was another group burial accompanied by hundreds of grave goods.

Beginning in the 1970s, a few administrative changes took place at the site. Ever since the state park was established in 1925, the property was managed the Illinois Department of Parks and Memorials, later re-named the Illinois Department of Conservation. Management continued under the Conservation Department until 1971 when control of the site was split between the Illinois State Museum and the Illinois Department of Conservation. Together the two institutions agreed to work on developing an interpretive and educational program at the site and to improve the quality of the museum (Young and Fowler 2000:194). In 1976, the Department of Conservation again took on full responsibility of the site's management. It was decided that same year that the park's name would change. Instead of Cahokia being referred to as a state park, as it had been called for over 50 years, the Conservation Department felt it was necessary to re-name the park under the title "Cahokia Mounds State Historic Site" as a way to stress its cultural and historical significance. The word "park" in Cahokia's previous title often gave visitors the impression that the site was a place intended for camping and recreational activities. And actually, in the years leading up to the 1970s, the Cahokia Park had attracted its fair share of guests who came to the site for its camping and recreational amenities. Later, in 1984 management of the Cahokia Site shifted from the Illinois Department of Conservation to the newly established Illinois Historic Preservation Agency (IHPA). The Cahokia Site has been administered by the IHPA ever since.

In the 1970s, while the site was still under the management of the Illinois Department of Conservation, energies were geared towards acquiring additional land to add to the site and preparing for the development of a new museum (Fowler 1997:39). The original museum, built around 1930, was over 40 years old at this point, and was beginning to show its age. The walls of the museum were cracking, the roof was leaking, and the pipes connected to the furnace were held together by rust and encrustations (Iseminger 1990:11). And the guests at the museum weren't the only visitors. Birds made nests in the ceilings, poisonous brown recluse spiders often made their way inside, and mice took up residence inside the museum's walls and any available hiding place (Iseminger 1990:11). Sometimes at night, after the museum had closed for the evening, the mice came out from behind the walls and set off the museum's alarm when running past its sensors (Young and Fowler 2000:203). Furthermore, for a site as grand as Cahokia, the old museum was too small, regardless of some of the renovation projects that had taken place in attempts to better utilize the space at hand. More room was needed for the gift shop, theatre, offices, storage, parking, and the growing number of displays.

Three areas on the site were proposed for the location of the Interpretive Center before a final decision was made for its location. In 1975 and 1976, Elizabeth Benchley, with the University of Wisconsin-Milwaukee and Robert Hall of the University of Illinois Chicago-Circle conducted extensive testing at the first proposed museum location, the Dunham Tract (also called the Interpretive Center Tract) located south of Tract 15B. Their methods involved soil coring, surface surveys, test excavations, phosphate testing, and magnetometer studies. The various methods used yielded results that indicated that the Dunham Tract was a location once highly utilized by Cahokia's prehistoric inhabitants. Because significant amounts of archaeological remains were identified in this location, a new proposed location was chosen. The new location was located to the south of Monks Mound and south of the Mounds Acreage Subdivision. The new proposed location was called the Interpretive Center Tract I (ICT-I). This location was in part situated on a low-lying piece of ground, while a few acres existed in a heavily wooded area

that appeared to have never been disturbed by modern farming. Testing at this location confirmed that the entire tract of land was utilized in prehistoric times to some extent.

In the process of testing ICT-I., a series of soil cores were placed in between Mound 61 and Mound 62. From the core samples, archaeologists were able to determine that the causeway between the two mounds represented on Patrick's 1870s map, did in fact exist (Young and Fowler 2000:201).

Besides the fact that the new proposed Interpretive Tract I. location held prehistoric cultural remains, it was also located in an area on the site that was prone to flooding. A combination of these two factors forced archaeologists to choose a new location for the museum. The third proposed museum tract was named Interpretive Center Tract II (ICT-II).

Archaeologists from Southern Illinois University at Edwardsville (SIUE) were called upon to conduct testing in this new location, and again prehistoric debris and features were discovered. By this point, time had elapsed into the mid 1980s. Testing continued and over 400 features, including many residential related features were recorded and excavated. Although the land contained these findings (as would most of Cahokia's property), this site would represent the least intrusive and best-suited place for the museum. Funding for the new museum came from a newly established state tax on soda, and finally, on September 23, 1989 Cahokia Mound's 33,000 square foot (3066 sq. meter), 8.2 million dollar Interpretive Center was opened to the public (Figure 4).

Beginning in the 1960s, additional acres were added to the site; the first time since 1925. Land acquisition was especially robust in the 1970s and in the 1980s. The Rattlesnake tract located on Cahokia's southern periphery was added to the site in November 1980. The following year in 1981, the Kreider Truck Company property located to the east of Monks Mound was purchased with the help of the National Trust for Historic Preservation. Later, the Illinois Department of Conservation reimbursed the Trust for the property. Today the Kreider Truck building serves as Cahokia's maintenance building. In 1983, land containing an x-rated Falcon Drive-In Theatre to the southwest of Monks Mound was purchased and demolished. Then in

October 1984, 376 acres were added to the site when the land was purchased from Harriet Bunselmeyer for $733,240. A large land acquisition project began in the 1970s that involved the state's purchase of 67 houses located in a subdivision immediately southeast of Monks Mound. By the late 1980s, every house was purchased by the state, and all homes were removed, with the exception of two. The two houses remaining served as residences for the site's staff, and today only one house remains. Two other tracts purchased around this time included a tract of land surrounding the Merrell Mound, mound number 42, and tracts of land including mounds 5, 15, and 16 (Iseminger 1990:13).

In the 1980s, some serious slumping issues with Monks Mound emerged. Minor slumping of Monks Mound's sides had occurred to some extent in previous decades, but the 1980s bore witness to some of the largest slump failures in the site's history. In 1984, at the north end of Monks Mound, towards the top, a large crack appeared where the soil was beginning to separate from the mound face. That same year, another slump appeared on the east side of the mound and was worse than the previous one on the mound's north side. Soil that was once compacted, and secured by Cahokia's moundbuilders, had slid some 20 feet down Monks Mound's east side (Iseminger 1990:15). It so happened that in the same location where this slumpage had occurred, sat one of Monks Mound's east lobes. Both of Monks Mound's east lobes, in previous years, were believed to be access ramps formed intentionally by Cahokia's prehistoric inhabitants. It was realized after archaeologists bore witness to the 1984 slumping, that the east lobes were not built as ramps, but were the result of slumping in ancient times.

Following the major east face slump failure, in 1985 another major slump failure occurred, but this time on the western face of Monks Mound, and in the location of the mound's second terrace. In both instances, a geotechnical engineering firm was called upon to determine the best method for dealing with the slumpage, and the Illinois State Museum was hired to study the east slump (Skele 1988:92). Meanwhile, Southern Illinois University at Edwardsville (SIUE), under the direction of William Woods examined Monks Mound's west slump (Skele 1988:98). In 1988 the

east slump was repaired using donated soil from the Illinois Department of Transportation, while the remaining soil from IDOT's donation was used to reconstruct four mounds that were razed during the construction of the Mounds Acreage Subdivision. One of those mounds was the Murdock Mound, number 55, that Harriet Smith had excavated in 1941.

In regards to the west slump, it is my understanding that because the slump had stabilized itself, it was decided that the least destructive method of handling the slump failure was to leave it be. It wasn't until the mid 1990s when a portion of the west face became active again and slumped a few more feet. Soon after, the slump stabilized, and the open gaps caused by the slumping were filled. Then in 2004, the northwest corner of Monks Mound slumped, followed by the east and west sides in 2005 (Iseminger, et al 2007:12). The location that had slumped on Monks Mound's east face in 2005 happened to be the exact location where it had previously slumped in 1984.

In all, two years were spent contemplating the best solution of how to go about fixing the slumping that had occurred in 2005. The method chosen was one that was believed to be the least invasive and also the most effective way of repairing the mound. Beginning in the summer of 2007, both the northwest and east slump failures were repaired. In essence, the procedure involved, first removing the soil that was once used to fill in the cracks caused by slumping in previous years, and then cutting a series of steps, or terraces into the mound fill as a way of preventing any future slump failures. During the repair project, numerous photographs and maps were produced documenting the mound's stratigraphy. Furthermore, over 100 soil samples were taken and all materials found were carefully documented. It was decided not to attempt fixing the western slump because it was more complex and less of a threat to the top of the mound (Iseminger, et al 2007:13).

In 1988, a project was undertaken by Southern Illinois University at Edwardsville (SIUE) field school in an attempt to locate the southern most portion of the palisade wall, in the location immediately south of the Fox Mound, number 60, and Round Top Mound, number 59, together

often referred to as the Twin Mounds. During the field school, a remote sensing technique called electromagnetic conductivity (EMC) was employed to assist in locating the palisade trenches buried beneath the ground. Directing the EMC testing was a graduate student named Rinita Dalan. The remote sensing testing as well as the placement of three excavation trenches to the south of mounds 59 and 60 confirmed the presence of the palisade wall in this location (Woods and Holley 1997:228). It was noticed while conducting testing in this area that a raised platform existed beneath mounds 59 and 60, raising both mounds approximately three feet (1meter) above the height of the prehistoric ground surface. The existence of a buried platform in the southern portion of the site prompted further research in the plaza area to the north of mound 59 and 60 to see if the platform may have extended across the length of the plaza.

The following summer, in 1989, a field school through SIUE set out to conduct research on the plaza area. The primary investigators were Rinita Dalan, George Holley, and Philip Smith (Young and Fowler 2000:214). Testing within the plaza revealed a buried sand ridge beneath mound 48 extending in a southeast direction towards mound 56 (Woods and Holley 1997:228). Additionally, it was discovered that the plaza area had been deliberately raised, and that the plaza area, previous to its construction, was used as a place to retrieve soil for mound building. A number of borrow pits were identified beneath the plaza, supporting this idea. Investigations at the Grand Plaza continued into the mid 1990s.

Continuing into the 1990s, excavations proceeded in following the palisade wall along the central portion of the site. Two excavations at the southeast portion of the central palisade, one in 1988 under the direction of Dr. George Holley of Southern Illinois University at Carbondale, and another in 1993 under the direction of Dr. John Kelly of Washington University in St. Louis, found that the first palisade wall erected, followed a separate path and enclosed a larger area of land than the last three palisade stages (Holley, et al 1997:234). Field work between 1998-2003 located palisade wall features to the west of Cahokia's Grand Plaza and field schools beginning in 2004 have since worked in the location to the northeast of Monks Mound in search of the north

palisade wall (Trubitt and Iseminger 2007). In the summer of 2008, for the first time, a portion of the northern palisade wall was identified.

One exciting discovery at Cahokia in the early 1990s was in the location of mound 72. Upon an examination of aerial photographs taken of the Cahokia site in 1979, Melvin Fowler noticed a small mound on the photographs that he had not seen in the 1960s when surveying the site for the University of Wisconsin-Milwaukee's topographic map. He overlooked the small rise in the landscape because at that time it was covered with trees and heavy foliage. By 1979, the trees and brush had been cleared. Fowler created a contour map of this mound and added it to the 1966 UW-M map. Fowler called it mound 96. In an attempt to come to terms with how this mound might relate to its neighboring mound, Mound 72, to the northeast, Fowler began experimenting with angles and measurements, and found that his earlier discovery of Post Pit 1 at Mound 72 was positioned at a distance of 125 meters from the center point of mound 96. Interestingly, the distance between Post Pit 1 and the center of Mound 96 was exactly equal in length to the diameter measurement of Warren Wittry's Woodhenge III discovered on Tract 15A in the early 1960s (Young and Fowler 2000:219). Further research and excavations in this location confirmed the presence of a woodhenge, which came to be known as Woodhenge 72 because of its relationship with mound 72.

Attracted to the earlier work and discoveries at Mound 34, archaeologists Dr. John Kelly and Dr. James Brown decided to re-investigate the area, beginning in 1998. The main goals throughout Kelly and Brown's investigations were to 1) relocate the earlier 1950s excavations, 2) identify the "ceremonial fires" identified by Perino from which the engraved shell and other ritual items came, 3) locate the refuse trench described by Perino, and 4) locate two possible copper workshops identified by Perino to the north of the mound (Kelly et al 2007:68).

To date, 11 consecutive summer and fall seasons have been spent investigating Mound 34, and summer 2009 will mark the 12th field season. Assisting with the work at Mound 34 throughout the years included field schools from Washington University in St. Louis, Northwestern

University in Evanston Illinois, and University of Missouri-St. Louis, as well as volunteers of the Cahokia Mounds Museum Society. With the help of volunteers and students, Kelly and Brown's first three goals proposed for their work were largely in part accomplished by the end of the 2005 season. Focus on locating the copper workshops suggested by Perino began in 2003, and continued in 2005 through 2008. Earlier excavations in 2003, 2005, and 2006 were unsuccessful in locating the copper workshops. In 2007, a concentration of over 100 small copper flecks were discovered in the northeast corner of one of the test units beneath the initial mound stage, and the western margins of one of the copper workshops was identified (Kelly et al 2009:13). Dr. Brown, who has been involved with the Mound 34 project since 1998, is of the opinion that this area immediately north of mound 34 is the location where large copper repoussé plates and status objects were manufactured around AD 1200 (Belknap 2008:12-13). In 2008, the westernmost copper workshop was verified (Kelly et al 2009). It was discovered that the copper working took place inside the copper workshop house towards its southwest corner. Again in 2008, numerous small copper pieces were located inside the copper workshop house, which were documented, and removed. In addition to the copper workshop, a house structure, named House 1, that Perino indicated on his 1950s map of the area, was first identified in the 2007 excavations to the north of the copper working area. Then, in 2008 the western wall and southern edge of House 1 was exposed (Kelly et al 2009:20). A few artifacts of interest from the 2008 season included two fragments of an engraved marine shell cup, a double-barbed (Caddoan) point, small copper pieces, and a drilled shark's tooth. This year's 2009 season of work at Mound 34 will focus on defining the limits of the copper workshop and the full extent of House 1 (Kelly et al 2009:39).

With the previous several pages dedicated to describing in brief some of Cahokia's key events occurring post 1940s, we have arrived at Cahokia Mounds in the present day, 2009.

Today, the Cahokia Mounds State Historic Site, which is the location of the once largest pre-Columbian Indian settlement site in North America, is a truly remarkable place by which none other can compare. The site, with the assistance of many dedicated individuals, has come to be

recognized as a UNESCO World Heritage Site and a U.S. National Landmark, two telling indicators of Cahokia's significance to North American history, and moreover world history. Presently, the site, which is owned by the state of Illinois and managed by the Illinois Historic Preservation Agency (IHPA), includes 2200 acres of the original 3,800 acres once contained within the prehistoric site boundaries. Included within this 3,800-acre space were approximately 120 earthen mounds of various sizes. Today, the Cahokia Mounds State Historic Site contains 70 of the remaining 80 mounds, including the largest prehistoric earthen construction in the Americas (Illinois Historic Preservation Agency Pamphlet). In 1989, the 33,000 square foot Interpretive Center was opened for the purpose of educating the public in understanding and interpreting Cahokia's past. And on average, Cahokia Mounds attracts more than 300,000 visitors to the site each year.

From onsite excavations occurring in the later half of the 20th century, archaeologists have begun to unravel some of Cahokia's buried and best kept secrets. Today we are aware that a large temple-type building, measuring 104 feet (32 meters) long (east to west) and 48 feet (15 meters) wide (north to south) was erected on Monks Mound's summit (Mink 1992:25). Its location suggests it was one of the most important buildings on the site (Fowler 1997:100). Through an examination of some faint white lines on early aerial photographs, it has been discovered that a palisade wall built and re-built a total of four times, once surrounded the central core of the site, enclosing within it, Monks Mound and a number of other smaller mounds. The latest discovery on the palisade project was the discovery of a portion of the northern palisade wall. Not very long ago, it was confirmed through salvage excavations that a Woodhenge, once erected in a location to the west of Monks Mound, was built not once, but five times from A.D. 1100-1200 (Iseminger 2008:14). In the 1990s, archaeologist Dr. Melvin Fowler located an additional Woodhenge on the site, which he designated Woodhenge 72. One of Cahokia's Woodhenges, to the west of Monks Mound, was re-built in 1985 at its original founding location and today serves as an attraction to the many visitors who come to the site each year. Through

archaeological investigations on the site and a close study of its habitation areas, it has been figured that Cahokia, at its peak between A.D. 1050-1150, was home to approximately 10 to 20 thousand people (Illinois Historic Preservation Agency Pamphlet).

In observance of Cahokia's numerous achievements, triumphs, and archaeological discoveries in the site's more recent years, I can't help but be reminded of the earliest of days, only 200 years ago when Cahokia's mounds were noticed by the first mapmakers and explorers of the day. The first thorough account of the site began at the pen of Henry Marie Brackenridge, who in 1811 approached the foot of the principal mound, staring in admiration of the massive earthen monument that stood before him. Taken aback by its size and wonder Brackenridge wrote, "What a stupendous pile of earth! To heap up such a mass must have required years, and the labor of thousands". Brackenridge having laid down the first detailed account of the mounds set the foundation for all who were to follow. Those like Reverend Timothy Flint, Charles Joseph LaTrobe, G.W. Featherstonhaugh, and Edmund Flagg, who, like Brackenridge, contributed their observations to Cahokia's historic account and whose claims to Cahokia's uniqueness likely stirred up an interest in the mounds by those who read their stories. Artists Karl Bodmer in the 1830s, and J.C. Wild in the 1840s, both offered their talents with the production of the first known drawings of Cahokia's mounds and surrounding landscapes for our historic posterity. In the 1870s, there was John J.R. Patrick, who was the first of his time to recognize the need for an accurate map of the Cahokia region. We are forever indebted to Patrick and his decision to accurately and skillfully map Cahokia's mounds, the East St. Louis mounds, and the mounds at the Pulcher site, south of Cahokia. Today, and well into the future, these maps will remain an invaluable piece of the site's history. It is my sincere wish for funding to become available so that Patrick's map of the Pulcher site may be restored to its original condition, similar to his other four maps which have recently been conserved.

Beginning in the mid 1800s, there are those who deserve credit for their contributions towards Cahokia's initial preservation. There was Thomas Ramey and his family who owned a large

portion of land holding several mounds. Luckily, Mr. Ramey and his heirs very much wanted to see Cahokia's mounds preserved in a state park. This came at a time when outside sources had their own ideas about what the mounds could be used for; possibilities ranging from a memorial park, to a beer garden, and even one rumor that surfaced was for Monks Mound to be destroyed and its soil used to fill in low lying lands in the American Bottoms. When individuals sought permission to dig on Mr. Ramey's property, he promptly denied their request. On several occasions, Ramey spoke publicly in attempts to raise awareness of Cahokia's importance. Fortunately, Monks Mound and several others of Cahokia's mounds had found themselves in the possession of such protective and caring hands. Had these mounds belonged to someone else, it is very possible they would not be with us today.

It was John Francis Snyder whose efforts began the long uphill struggle to save the mounds. Snyder recognized Cahokia's significance to archaeology and heavily advocated for the preservation of the mounds. Desperate to see Monks Mound protected in a state park setting, Snyder founded the organization "Monks of Cahokia", which promoted Cahokia's conservation, and in early 1900 at the first meeting of the Illinois State Historical Society, he pleaded for the protection of Cahokia's mounds and Illinois antiquity. With the help of Cahokia supporters, Snyder convinced archaeologist Warren King Moorehead to visit the site in the early 1920s.

Besides Snyder, Clark McAdams and David I. Bushnell Jr. also played a critical role in seeing to Cahokia's preservation. Both McAdams and Bushnell addressed their concerns and desires for Cahokia's future in their writings, and moreover wrote letters to the Illinois state legislator showing their support of a bill that would turn Monks Mound and surrounding land into a state park. Other organizations and concerned individuals wrote letters on behalf of Cahokia's preservation as well.

In 1921, Warren King Moorehead stepped foot onto the Cahokia premises and began to transform the dreams held for Cahokia into a reality. His presence came at a time when the mounds were in constant danger of expanding urban developments into the area. Moorehead's

commitment to his work resulted in some of the most extensive excavations ever undertaken at the site, and ultimately his efforts led to the preservation and protection of the first 144.4 acres of Cahokia land in 1925. Together, Moorehead and Morris Leighton demonstrated to the satisfaction of geologist A.R. Crook that indeed the mounds at Cahokia were man-made structures and not geological features as previously suspected. Warren King Moorehead's presence at Cahokia was truly a Godsend, and his contributions to Cahokia's initial preservation will forever be remembered.

Much would be lost if not for the determined salvage explorations of Paul F. Titterington and Harriet Smith. In a short time, and under intense pressure, both Titterington and Smith managed to extract a great deal of information from mounds that would have otherwise been lost to the bulldozer and plow. It was Titterington who kept up with the current happenings of the day and called upon the Illinois Universities when he felt Cahokia's mounds were in jeopardy. In the early 1930s, Titterington dedicated his energies in gaining information on the internal contents of the Powell Mound prior to its destruction, and in 1938 published his observations of the mound in *The Cahokia Mound Group and Its Village Site Materials*. The loss of the Powell Mound represents one of the most unfortunate tragedies in all of Cahokia's history. Thankfully, Titterington was present to capture the last memories we have of this spectacular earthen monument. Later, Harriet Smith, in the early 1940s, salvaged as much information as possible from the Murdock Mound before its replacement by the Mounds Acreage Subdivision development. Dr. Melvin Fowler in his *Cahokia Atlas* states that because of Harriet Smith's detailed work, the Murdock Mound is today "one of the most completely excavated and examined mounds at the Cahokia site" (1997:121). Both Titterington and Smith's early salvage efforts have contributed immensely to our understanding of Cahokia's prehistoric people and their way of life.

In 1813, Henry Brackenridge, following his visit to the site, wrote a letter to Thomas Jefferson expressing his disappointment that Cahokia, particularly Monks Mound, had attracted no notice.

I think if Brackenridge were able to visit the site today he would be pleased to see that Cahokia has since been given the recognition it deserves. The largest pre-Columbian earthwork in the America's that Brackenridge gazed upon in admiration in 1811, centuries later still conveys the same type of feelings to those who bare witness to Monks Mound today.

Although we can see that the site has come a long way from the days of Brackenridge, continued support is critical and cannot stop with this generation. There is still much to be done, as the work here is far from complete. Little do most people realize there are approximately 1,600 acres within what is considered the prehistoric Cahokia site boundaries that remains unprotected by the Illinois Historic Preservation Agency. This means that land containing considerable archaeological information pertaining to these prehistoric peoples is prone to development and is at risk of being lost forever. Additionally, in July of 2008, the Governor of Illinois cut 2.7 million dollars from the Illinois Historic Preservation Agency's 2009 Fiscal budget. This cut has severely impacted Cahokia Mounds and all Illinois State Historic Sites. For Cahokia, this has resulted in the layoff of several employees, four of who were full-time staff and had contributed to the site for nearly two decades (*Cahokian* 2008:11). Those individuals who were laid off held important positions including; maintaining the Interpretive Center Museum, running the site's volunteer program, organizing special events at the site, and educating the public on Cahokia Mounds. Now the site is forced to carry on without these important and dedicated staff members. The budget cuts have also affected the site in other ways. Due to budget reductions, the operating hours of the Interpretive Center Museum have been cut by two days a week. The closure of the museum for two days each week is unfortunate for several reasons. For one, the gift shop, which is located inside the museum, is one of the primary sources of income for the site. The revenue lost from the gift shop sales will impact the site's ability to provide its free educational programs like *Kid's Day* and an *Archaeological Lecture Series*, to name just two. Museum closures have also disappointed many of Cahokia's guests who come from all over the globe to witness the site first hand. Recently, while I was working outdoors on

a project at the site, our excavations were visited by a group of tourists who had come all the way from Europe to explore the site on their vacation. It just so happened they came on a day when the museum was closed, and because of this they expressed to me their dismay. It is upsetting that a World Heritage Site must run under such circumstances![1] It is in these difficult times that Cahokia Mounds must rely on community and individual support. Luckily, there are several ways to contribute and get involved.

One way to help is by becoming a member of the Cahokia Mounds Museum Society. The Cahokia Mounds Museum Society is a not-for-profit organization originally founded in 1976, which lends support to the Cahokia Mounds State Historic Site. The mission of CMMS since its establishment has been to preserve, protect, and promote the prehistoric metropolis of Cahokia Mounds (Cahokia Mounds State Historic Site Website 2009). Beginning in January 2000, one of the goals of CMMS has been to purchase unprotected Cahokia land from willing sellers at a fair price (Cahokia Mounds State Historic Site Website 2009). Once the land has been purchased by CMMS the land is donated to the Illinois Historic Preservation Agency and is included and protected within the site boundaries. From January 2000, when the CMMS donation program began, to July 1, 2009, the Museum Society has donated a total of 42 parcels (comprising of 51 lots) to the Cahokia Mounds State Historic Site (Leah Joyce, Executive Director of the Cahokia Mounds Museum Society, personal communication 2009). The donated lots total approximately 8 ¼ acres of land and contain portions of five mounds. Most of the purchased property resides in the State Park Place Subdivision (to the east of Monks Mound); one parcel is at the east edge of the site, and there are four parcels located at the Sam Chucallo Mound Tract (Leah Joyce, personal communication 2009). CMMS also offers free educational programs to people of all ages. One of their programs allows its members to participate on archaeological digs at the site.

[1] Subsequent to the writing of this thesis chapter it has been reported in the summer 2009 *Cahokian* that due to the replacement of the Illinois Governor Blagovich earlier this year with Governor Quinn, Cahokia has witnessed some positive changes. Thankfully, the Interpretive Center staff that was laid off in late 2008 has since been re-hired. Also, the Interpretive Center is now open seven days a week through October 31st, and beginning November 1st the site will remain open six days a week (*Cahokian* 2009:11).

This year volunteers will be working at Mound 34 in an effort to define the boundaries of one of the copper workshops that was identified in the summer of 2008.

Another organization to become involved with is the Powell Archaeological Research Center. The Powell Archaeological Research Center (PARC) is a not-for-profit organization that was established in 1997 by a group of committed individuals concerned about the destruction of archaeological sites by ongoing development in the metropolitan St. Louis region (Powell Archaeological Research Center Website 2009). PARC's name is derived from Cahokia's Powell Mound that was demolished in the early 1930s, and their headquarters are in very close proximity to where the Powell Mound once existed. One way PARC is involved with the preservation of archaeological resources is by purchasing valuable archaeological land in the St. Louis metropolitan area when it becomes available. One of their most recent accomplishments was the purchase of two lots in East St. Louis, Missouri. The reason for this purchase is because investigations have shown that the prehistoric settlement in East St. Louis (previously named Illinoistown) that Brackenridge spoke of in 1811, still remains beneath the surface of the city (Powell Archaeological Research Center Newsletter 2008). Another purchase by PARC was a 2.5-acre of land within the Cahokia site. And one long-term goal for PARC is to re-create a trail that would connect both the East St. Louis Mound Group and the Cahokia Mound Group (Kelly 2003:22).

All these efforts are great, but they cannot stop with the here and now, and it is going to take the support and enthusiasm of the local community as well as local landowners, the Native Americans, and many other individuals to keep this tradition going. Other important ways to get involved include volunteering time at the site, and contacting local state legislators in a push to override the most recent budget cuts affecting Cahokia Mounds and all other Illinois State Historic Sites.

For the present and future we must carry on with people who will take up the torch and march forward in continuing in the footsteps of those who came before. In the beginning, it was Henry

Brackenridge who gave us the first thorough record of the site and John J.R. Patrick who contributed the first detailed map of the mounds. Many since then have gone on to contribute their time, money, and talents to the site, and many are still working with a love and passion in support of Cahokia today. As we approach 200 years of discovery at Cahokia Mounds let us embrace the vision of those who have worked so hard for its protection and preservation. Long may that vision prosper.

THE SETTING SUN AT THE CAHOKIA MOUNDS STATE HISTORIC SITE

Taken in the fall, 2007

Cahokia Mounds Museum Society (CMMS)

Join today at www.cahokiamounds.org

Or by calling 618-344-7316

Powell Archaeological Research Center (PARC)

Join today at www.powellarchaeology.org

‘Don’t Drink the Water’
By The Dave Matthews Band

Come out come out
No use in hiding
Come now come now
Can you not see?
There's no place here
What were you expecting
Not room for both
Just room for me
So you will lay your arms down
Yes I will call this home

Away away
You have been banished
Your land is gone
And given me
And here I will spread my wings
Yes I will call this home
What's this you say
You feel a right to remain
Then stay and I will bury you
What's that you say
Your father's spirit still lives in this place
I will silence you

Here's the hitch
Your horse is leaving
Don't miss your boat
It's leaving now
And as you go I will spread my wings
Yes I will call this home
I have no time to justify to you
Fool you're blind, move aside for me
All I can say to you my new neighbor
Is you must move on or I will bury you

Now as I rest my feet by this fire
Those hands once warmed here
I have retired them
I can breathe my own air
I can sleep more soundly
Upon these poor souls
I'll build heaven and call it home
'Cause you're all dead now
I live with my justice
I live with my greedy need
I live with no mercy
I live with my frenzied feeding
I live with my hatred
I live with my jealousy
I live with the notion
That I don't need anyone but me
Don't drink the water
Don’t drink the water
There's blood in the water
Don’t drink the water

References

Ahler, Steven R., and Peter J. DePuydt

1987 *A Report on the 1931 Powell Mound Excavations, Madison County, Illinois.* Illinois State Museum Reports of Investigations, No. 43. Springfield.

Allen, Michael R.

2003 The Harnessed Channel: How the River Des Peres Became a Sewer. *Ecology of Absence*, Electronic document, http://www.eco-absence.org/text/desperes.htm, accessed March 12, 2008.

Anderson James

1969 The Cahokia Palisade Sequence. In *Explorations into Cahokia Archaeology*, edited by Melvin L. Fowler, pp. 89-99. Illinois Archaeological Survey Bulletin, No. 7. University of Illinois, Urbana.

Belknap, Lori

2008 Quest for Copper Workshop Continues. *Cahokian*, (Fall), pp. 12-13.

Brackenridge, Henry M.

1813 On the Population and Tumuli of the Aborigines of North America: A Letter from H.M. Brackenridge, Esq. To Thomas Jefferson. Read Oct. 1, 1813. *Transactions of the American Philosophical Society*, Vol. 1, pp. 151-159.

1814 *Views of Louisiana Together with a Journal of a Voyage up the Missouri River, in 1811*. Printed and Published by Cramer, Spear and Eichbaum, Franklin Head Office, Pittsburgh.

Bryant, William Cullen

1854,1871 The Prairies. In *The Complete Poems of William Cullen Bryant*, by H.C. Edwards, pp. 130-133. Chesterland, Ohio.

Brown, Margaret

1977 A Special Understanding. *Cahokian*, (July), pp. 1-5.

Bushnell, David I, Jr.

1904 The Cahokia and Surrounding Mound Groups. *Papers of the Peabody Museum of American Archaeology and Ethnology* Vol. 3, No. 1, pp. 3-20. Harvard University Press, Cambridge.

1922 Archaeological Reconnaissance of the Cahokia and Related Mound Groups. *Explorations and Field Work of the Smithsonian Institution in 1921, Smithsonian Miscellaneous Collections*, Vol. 72, No. 15, pp. 92-105. Washington, D.C.

Byers, Douglas S.

1939 Warren King Moorehead. *American Anthropologist*, New Series, Vol. 41, No. 2, pp. 286-294, Blackwell Publishing.

Cahokia Mounds Association
1917 *Save The Mounds*, A pamphlet of letters & petitions published by the Cahokia Mound Association, on file at the Cahokia Mounds State Historic Site Library.

Cahokia Mounds Museum Society
2008 Governor's Slashed IHPA Budget Detrimental to Illinois' Heritage. *Cahokian.* (Fall) pp. 11.

2009 IHPA Status. *Cahokian* (Summer) pp. 11.

Cahokia Mounds State Historic Site Website
2009 Information on Woodhenge. Electronic document, http://www.cahokiamounds.com/explore/cahokia-mounds/woodhenge, accessed, March 12, 2009.

2009 Information on the Stockade. Electronic document, http://www.cahokiamounds.com/explore/cahokia-mounds/stockade, accessed, March 12, 2009

2009 Donate to the Land Acquisition Fund. Electronic document, http://www.cahokiamounds.com/support/donate-to-land-acquisition-fund accessed, March 15, 2009

Connolly, Phyllis E.
1962 A Biographical Essay. In *John Francis Snyder: Selected Writings,* edited by Clyde C. Walton, pp. 3-24. The Illinois State Historical Society, Springfield, Illinois.

Crook, Alja R.
1915 Origin of Monks Mound. *Bulletin of the Geological Society of America,* Vol. 26, pp. 74-75. New York.

1922 *The Origin of the Cahokia Mounds.* Bulletin of the Illinois State Museum (May). Springfield.

DeHass, Wills
1869 Archaeology of the Mississippi Valley. *Proceedings of the American Association for the Advancement of Science. 17th Meeting Held at Chicago, Illinois, August, 1868,* pp. 288-302. Joseph Lovering, Cambridge.

Eckberg, Carl J., and William E. Foley (editors)
1989 *An Account of Upper Louisiana* by Nicolas de Finiels. Translated by Carl J. Ekberg. University of Missouri Press, Columbia.

Featherstonhaugh, G.W.
1844 *Excursion through the Slave States,* Vol. 1, Harper, London and New York.

Flagg, Edmund
1838 *The Far West: or, A Tour Beyond the Mountains,* Vol. 1, Harper and Brothers, New York.

Flint, Timothy
1826 *Recollections of the Last Ten Years, Passed in Occasional Residences and Journeyings in the Valley of the Mississippi, from Pittsburgh and the Missouri to the Gulf of Mexico, and from Florida to the Spanish Frontier; in a Series of Letters to the Rev. James Flint, of Salem, Massachusetts.* Cummings, Hilliard, and Company, Boston.

Fowler, Melvin L.
1962 Pioneer Archaeologist: John Francis Snyder, An Appraisal. In *John Francis Snyder: Selected Writings,* edited by Clyde C. Walton, pp. 181-189. The Illinois State Historical Society, Springfield.

1969 The Cahokia Site. In *Explorations into Cahokia Archaeology*, edited by Melvin L. Fowler, pp. 1-30. Illinois Archaeological Survey Bulletin, No. 7. University of Illinois, Urbana.

1989 *The Cahokia Atlas: A Historical Atlas of Cahokia Archaeology.* Studies in Illinois Archaeology No. 6. Illinois Historic Preservation Agency, Springfield.

1997 *The Cahokia Atlas: A Historical Atlas of Cahokia Archaeology.* Revised edition. Studies in Archaeology, No. 2. University of Illinois at Urbana-Champaign.

Diaz-Granados, Carol and James R. Duncan
2000 The *Petroglyphs and Pictographs of Missouri.* The University of Alabama Press, Tuscaloosa and London.

Diaz-Granados, Carol
2004 Marking Stone, Land, Body, and Spirit: Rock Art and Mississippian Iconography. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South,* edited by Richard F. Townsend and Robert V. Sharp, pp. 139-149. Yale University Press, New Haven and London.

Hall, Robert L.
1991 Cahokia Identity and Interaction Models of Cahokia Mississippian. In *Cahokia and the Hinterlands: Middle Mississippian Cultures of the Midwest*, edited by Thomas E. Emerson and R. Barry Lewis, pp. 3-34. University of Illinois Press, Urbana.

2004 The Cahokia Site and Its People. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South,* edited by Richard F. Townsend and Robert V. Sharp, pp. 93-103. Yale University Press, New Haven and London.

Hammes, Raymond H.
1987 A Chronology of Early Land Transactions in the Monks Mound Area. In *The River L'Abbe Mission*, by John A. Walthall and Elizabeth D. Benchley. Appendix B. Studies in Illinois Archaeology No. 2. Illinois Historic Preservation Agency, Springfield.

Holley, George R., William I. Woods, Rinita A. Dalan, and Harold W. Watters, Jr.
1997 Current Research (1990-1995). Appendix 6. In *The Cahokia Atlas: A Historical Atlas of Cahokia Archaeology*, by Melvin Fowler. Revised edition. pp. 231-235. Studies in Archaeology, No. 2. University of Illinois at Urbana-Champaign.

Illinois Historic Preservation Agency Pamphlet
n.d. *Cahokia Mounds State Historic Site: Collinsville, Illinois.* A pamphlet distributed by the Cahokia Mounds Interpretive Center, and printed by the authority of the State of Illinois.

Illinois State Museum
Lewis and Clark in the Illinois Country. Electronic document, http://www.museum.state.il.us/exhibits/lewis_clark_il/htmls/resources/about_website.html, accessed January 10, 2008.

Iseminger, William R.
1990 Looking Back Over 20 Years: Recollections of Cahokia. *Cahokian,* (Winter), pp. 7-18.

2008 Cahokia's Woodhenge. *Cahokian* (Spring), pp. 13-15.

Iseminger William, John Kelly, T.R. Kidder, Tim Schilling, and Mark Esarey
2007 Preserving Monks Mound's East Slope & Fourth Terrace. *Cahokian* (Fall), pp. 12-15.

Keller, William F.
1956 *The Nation's Advocate: Henry Marie Brackenridge and Young America.* Pittsburgh. University of Pittsburgh Press.

Kelly, A.R.
1933 Some Problems of Recent Cahokia Archaeology. *Transactions of the Illinois State Academy of Science,* Vol. 25, No. 4. pp. 101-103. Urbana.

Kelly, John E.
2000 *The Cahokia Mounds.* Edited and with an Introduction by John E. Kelly; A reprint of Moorehead's 1922, 1923, and 1929 publications of his research at Cahokia. Classics in Southeastern Archaeology, University of Alabama Press, Tuscaloosa.

2002 Charles Rau: Developments in the Career of a Nineteenth-Century German-American Archaeologist. In *New Perspectives on the Origins of Americanist Archaeology*, edited by David L. Browman and Stephen Williams, pp. 117-132. The University of Alabama Press, Tuscaloosa.

2003 The Preservation of the East St. Louis Mound Group: An Historical Perspective. In *The SAA Archaeological Record,* Vol. 3, No. 3. pp. 20-23.

Kelly, John E., James A. Brown, Jenna M. Hamlin, Lucretia S. Kelly, Laura Kozuch, Kathryn Parker, and Julieann Van Nest
2007 Mound 34: The Context for the Early Evidence of the Southeastern Ceremonial Complex at Cahokia. In *Southeastern Ceremonial Complex: Chronology, Content, Context*. Editor, Adam King, pp. 57-87.

Kelly, John E., Lucretia S. Kelly, and James Brown
2009 *Summary of 2008 Field Excavations to Locate the Copper Workshop in the Mound 34 Area.* (Draft) Report Prepared for the Cahokia Mounds Museum Society and under the auspices of the Central Mississippi Valley Archaeological Research Institute.

LaTrobe, Charles Joseph
1835 *The Rambler in North America*, Vol. 2, Harper and Brothers, New York.

Leighton, Morris M.
1923 The Cahokia Mounds: Part II, The Geological Aspects of Some of the Cahokia (Illinois) Mounds. *University of Illinois Bulletin*, Vol. 21, No. 6. pp. 54-97. Urbana.

1929 The Cahokia Mounds: Part II, Some Geological Aspects of Some of the Cahokia (Illinois) Mounds. *University of Illinois Bulletin* Vol. 26, No. 4. pp. 109-143. Urbana.

Long, Stephen H.
1823 *Account of an Expedition From Pittsburgh to the Rocky Mountains, Performed in the Years 1819 and 20, By Order of the Hon. J.C. Calhoun, Sec'y of War: Under the Command of Major Stephen H. Long*. Compiled from the Notes of Major Long, Mr. T. Say, and other Gentlemen of the Exploring Party. Compiled by Edwin James. Vol. 1, Carey and Lea, Philadelphia.

McAdams, Clark
1908 The Archaeology of Illinois. *Transactions of the Illinois State Historical Society for 1907*, Eighth Annual Meeting of the Society, Springfield, Ill., January 24-25, 1907. pp. 35-47. Springfield.

McAdams, William
1882 Antiquities. In *History of Madison County, Illinois*, pp. 58-64. W.R. Brink and Company, Edwardsville, Illinois.

Meltzer, David J.
1998 Introduction: Ephraim Squier, Edwin Davis, and the Making of An American Archaeological Classic. In *Ancient Monuments of the Mississippi Valley*, by Ephraim G. Squier and Edwin H. Davis, Reissue. Smithsonian Classics of Anthropology, pp. 1-96. Smithsonian Institution Press, Washington, D.C.

Milner, George R.
2004 *The Moundbuilders: Ancient Peoples of Eastern North America*. Thames and Hudson Ltd., London.

Mink, Claudia G.
1999 *Cahokia: City of the Sun.* Revised edition. Cahokia Mounds Museum Society. Collinsville, Illinois.

Moorehead, Warren K.
1893 Buried Alive, One's Sensations and Thoughts. *Science*, Vol. 21, No. 522, pp. 61, published by the American Association for the Advancement of Science.

1922 The Cahokia Mounds: A Preliminary Report. *University of Illinois Bulletin*, Vol. 19, No. 35. Urbana.

1923 The Cahokia Mounds: Part 1, A Report of Progress on the Exploration of the Cahokia group by Warren K. Moorehead and Part 2, Some Geological Aspects of Some of the Cahokia (Illinois) Mounds by Morris M. Leighton. *University of Illinois Bulletin*, Vol. 21, No. 6. Urbana.

1929 The Cahokia Mounds. *University of Illinois Bulletin*, Vol. 26, No. 4. Urbana.

1931a The Divining Rod and Fakers. *Science*, New Series, Vol. 74, No. 1906, pp. 42-43, published by the American Association for the Advancement of Science.

1931b A Plea for the Cahokia Mounds. *Transactions of the Illinois State Academy of Science*, Vol. 24, pp. 376-377.

National Historic Landmarks Program
2008 Electronic document, http://www.nps.gov/history/nhl/, accessed March 19, 2008.

O'Brien, Michael J., and Raymond W. Wood
1998 *The Prehistory of Missouri.* University of Missouri Press, Columbia.

Pauketat, Timothy R.
1993 *Temples for Cahokia Lords: Preston Holder's 1955-1956 Excavations of Kunnemann Mound.* Memoirs of the University of Michigan Museum of Anthropology, Number 26. University of Michigan, Ann Arbor.

Peet, Stephen D.
1891 The Great Cahokia Mound. *The American Antiquarian*, Vol. 13, No. 1. pp. 3-31 and pp. 58-59. Chicago.

Priest, Josiah
1833 *American Antiquities, and Discoveries in the West*, 2nd ed. Revised. Hoffman and White, Albany.

Powell Archaeological Research Center Newsletter
2008 Member Update (Summer-Fall 2008). Electronic Document, http://www.powellarchaeology.org/, accessed December 13, 2008.

Powell Archaeological Research Center Website
2009 Information about PARC. Electronic Document, http://www.powellarchaeology.org/PARCInfo.html, accessed March 13, 2009.

Powell, John W.
1894 Report of the Director: Introduction. In *Twelfth Annual Report of the Bureau of Ethnology, 1890-91*, pp. XIX-XLVIII. Washington, D.C.

Putnam, Frederick W., and John J.R. Patrick
1880 *Twelfth Annual Report of the Peabody Museum.* Reports of the Peabody Museum of American Archaeology and Ethnology in Connection with Harvard University, 1876-1879, Vol. 2, pp. 470-475. Cambridge.

Rau, Charles
2006 [1867] Indian Pottery. *Annual Report of the Board of Regents of the Smithsonian Institution Showing the Operations, Expenditures, and Condition of the Institution for the Year 1866*, pp. 346-355. Washington, D.C. Reprint. Elibron Classics, Adamant Media Corporation.

2006 [1869] A Deposit of Agricultural Flint Implements in Southern Illinois. *Annual Report of the Board of Regents of the Smithsonian Institution Showing the Operations, Expenditures, and Condition of the Institution for the Year 1868*, pp. 401-407. Washington, D.C. Reprint. Elibron Classics, Adamant Media Corporation.

Reed, Nelson A., John W. Bennett, and James Warren Porter.
1968 Soil Core Drilling of Monks Mound: Technique and Findings. In *American Antiquity*, Vol 33, No. 2., pp.137-148. Salt Lake City.

Silverberg, Robert
1968 *Mound Builders of Ancient America: The Archaeology of a Myth*. New York Graphic Society Ltd., Greenwich, Connecticut.

Skele, Mikels
1988 *The Great Knob: Interpretations of Monks Mound.* Illinois Historic Preservation Agency Studies in Archaeology, No. 4. Springfield.

Smith, Harriet
1969 The Murdock Mound, Cahokia Site. In *Explorations into Cahokia Archaeology*, edited by Melvin L. Fowler, pp. 49-88. Illinois Archaeological Survey Bulletin, No. 7. University of Illinois, Urbana.

Snyder, John Francis
1962 [1904] Certain Indian Mounds Technically Considered. In *John Francis Snyder: Selected Writings,* edited by Clyde C. Walton, pp. 230-273. The Illinois State Historical Society, Springfield.

Squier, Ephraim G., and Edwin H. Davis
1998 [1848] *Ancient Monuments of the Mississippi Valley,* edited and with an introduction by David Meltzer, Reissue. Smithsonian Classics of Anthropology, Smithsonian Institution Press, Washington, D.C.

St. Louis Globe-Democrat [St. Louis, Missouri]
1917 [Newspaper article on the Great Cahokia Mounds] 11 March. St. Louis, Missouri.

Sullivan Lynne P., and Timothy R. Pauketat
2007 Cahokia's Mound 31: A Short-Term Construction at a Long-Term Site. In *Southeastern Archaeology*, Vol. 26, No. 1, pp. 12-31.

Taylor, Jay L.B.
1929 The Cahokia Mounds: Part I, Mound Technique. *University of Illinois Bulletin*, Vol. 26, No. 4. pp. 65-80. Urbana.

Thomas, Cyrus
1894 Report on the Mound Explorations of the Bureau of Ethnology. *Twelfth Annual Report of the Bureau of Ethnology, 1890-91,* Washington, D.C.

Throop, Addison J.
1928 *The Moundbuilders of Illinois.* Call Printing Company, East St. Louis, Illinois.

Titterington, Paul F.
1938 *The Cahokia Mound Group and Its Village Site Materials.* St. Louis, Missouri.

Trubitt, Mary Beth and William Iseminger
2007 Cahokia's Palisade: An Overview of Seven Field Seasons of Tracking the Wall. Paper presented at the 72nd Annual Meeting of the Society for American Archaeology, Austin, Texas.

University Wisconsin-Milwaukee Archaeological Research Laboratory
2001 The Cahokia Mapping Project. Electronic Document, http://www.4.uwm.edu/archlab/cahokia/mapping.cfm, accessed February 5, 2009.

Walthall, John A., and Elizabeth D. Benchley
1987 *The River L'Abbe Mission.* Studies in Illinois Archaeology No. 2. Illinois Historic Preservation Agency, Springfield.

Wild, J.C.
1948 [1841] *The Valley of the Mississippi; Illustrated in a Series of Views.* Joseph Garnier, Publisher, St. Louis, Missouri.

Woods, William I. and George R. Holley
1997 Current Research (1984-1989). Appendix 5. In *The Cahokia Atlas: A Historical Atlas of Cahokia Archaeology*, by Melvin Fowler. Revised edition. pp. 225-230. Studies in Archaeology, No. 2. University of Illinois at Urbana-Champaign.

Worthen, Amos H.
1866 *Geological Survey of Illinois*, Vol. 1, Illinois Geological Survey, Urbana.

York, Everett L.
1974-1975 Ethnocentricity or Racism: Some Thoughts on the Nature of Early Indian-White Relations. In *American Indian Quarterly*, Vol. 1, No. 4. Winter, pp. 281-291. University of Nebraska Press.

Young, Biloine Whiting, and Melvin L. Fowler
2000 *Cahokia: The Great Native American Metropolis*. University of Illinois Press, Urbana.